

ARCHITECTURE

The PROFESSIONAL ARCHITECTURAL MONTHLY

CONTENTS

TEXT PAGES

"GLEN EYRIE." (Illustrated) -	Frederick J. Sterner, Architect. By Theodore M. Fisher -	Pages 1-3
THE GOTHIC WAY. PART III. (Illustrated)	By A. Kingsley Porter -	Pages 4-7
ARCHITECTS AND THEIR PRACTICE -	By "Experience" -	Pages 8, 9
COST OF LABOR AND COST OF BUILDING -	By Willis Polk -	Page 10
ON THE HONOR ROLL -	-	Page 10
EDITORIAL: COMPETITION PROGRAMMES IN THE SCHOOLS AND ATELIERS; AND OTHER COMMENT -	-	Pages 11, 12
ARCHITECTURE AND THE AVERAGE PERSON	By Talbot Faulkner Hamlin -	Page 14
THE SPLENDID EXECUTIVE ABILITY IN THE PROFESSION SHOULD BE MORE WIDELY GROUPED IN GOVERNMENT WORK -	By F. E. Davidson -	Page 16
THE SAMUEL W. BOWNE HALL -	Milton See & Son, Architects -	Page 22
ORGANIZED LABOR AND THE WAR -	-	Page 22
INDUSTRIAL VILLAGE FOR SOLDIERS AND SAILORS -	-	Page 22
BOOK REVIEWS -	-	Page 22
LEGAL DECISIONS -	By John Simpson -	Pages 24, 26

PLATES AND ILLUSTRATIONS

"GLEN EYRIE," COLORADO SPRINGS, COLO.	Frederick J. Sterner, Architect	Frontispiece
The Exterior (in Winter) -	-	Page 2
The Exterior -	-	Pages 1-3
Exterior Details -	-	Plate IV
Entrance Hall -	-	Plate V
Gallery -	-	Plate VI
Book Hall -	-	Page 3
Plan -	-	-
APARTMENT HOUSE, 925 FIFTH AVENUE, NEW YORK.	Warren & Wetmore, Architects	Plate I
Exterior -	-	Plate II
Entrance -	-	Plate III
Entrance Hall -	-	Page 15
Plans -	-	-
SAMUEL W. BOWNE HALL, DREW THEOLOGICAL SEMINARY, MADISON, N. J.	Milton See & Son, Architects	Plate VII
Exterior -	-	Plate VII
Main Dining Hall -	-	Plate VIII
Plans -	-	-
HOUSE, HERBERT E. GALE, SWAMPSCOTT, MASS.	J. Williams Beal, Architect	Plate IX
View from across the Lily Pond -	-	Plate X
Garden Wall and Service Wing -	-	Plate X
Entrance Porch -	-	Plate XI
Hall and Staircase -	-	Plate XII
Living Room -	-	Plate XII
Plan -	-	-
HOUSE, J. J. BOERICKE, MERION, PA.	Frank Seeburger, Charles F. Rabenold, Architects	Plate XIII
Exterior -	-	Plate XIV
Rear -	-	Plate XIV
Plans -	-	-
U. S. POST-OFFICE, GREENWICH, CONN.	James A. Wetmore, Supervising Architect, Treasury Department	Plate XV
Entrance Detail -	-	Plate XVI
Exterior -	-	Plate XVI
Plan -	-	-
EARLY ARCHITECTURE OF NEW JERSEY	Measured and Drawn by Albert E. Micklewright	Plates XVII, XVIII
Details of the Pulpit, Old Tennent Church, Tennent, N. J. -	-	-
EARLY ARCHITECTURE OF MARYLAND	Measured and Drawn by J. L. Keister, O. J. Munson	Plate XIX
Mantel, Montpelier, Md. -	-	-
EARLY ARCHITECTURE OF MAINE	Measured and Drawn by Geo. R. Mitchell	Plate XX
Porch and Doorway, L. D. M. Sweat Memorial, Portland, Me. -	-	-
ST. BARTHOLOMEW'S CHURCH, NEW YORK (in construction) -	Bertram Grosvenor Goodhue, Architect. Sketch by William La Zinske	Page 13
DESIGN FOR RESIDENCE FOR GEO. P. GREENHALGH, PERRYBURG, OHIO -	-	Page 17
PROPOSED RESIDENCE FOR WM. T. HYDE, COOPERSTOWN, N. Y. -	-	Page 18
PROPOSED HOUSE AT GUINEA CHASE FARM, WESTBURY, L. I. -	-	Page 19
DESIGNS FOR RESIDENCE, JAMES H. PERKINS, GREENWICH, CONN. -	-	Page 20
DESIGNS FOR RESIDENCE, JAMES H. PERKINS, GREENWICH, CONN. -	Alfred Hopkins, Architect	Page 21
HOUSE AND PLANS, CHAS. G. LATHROP, DETROIT, MICH.	Smith, Hinchman & Grylls, Architects	Page 23
HOUSE AND PLANS, H. R. JOHNSTON, MONTCLAIR, N. J.	Wallis & Goodwillie, Architects	Page 28

ARCHITECTURE, edited in the interest of the profession, is published the fifteenth of every month by CHARLES SCRIBNER'S SONS (Charles Scribner, President), Fifth Avenue at 48th Street, New York.

PRICE, mailed flat to any address in the United States, Mexico, or Cuba, \$5.00 per annum in advance; to Canada, \$6.00 per annum; to any foreign address, \$7.00 per annum.

ADVERTISING RATES upon request. The writing and displaying of Advertisements is an art in itself, and the publishers will be pleased to give the advertiser the benefit of an Expert's experience in this line at no additional expense.

ENTERED at the New York Post-Office as second-class mail matter.

COPYRIGHT, 1918, BY CHARLES SCRIBNER'S SONS, FIFTH AVENUE AT 48TH STREET, NEW YORK



LAMP STANDARD, MULTNOMAH PUBLIC LIBRARY PORTLAND, ORE. DOYLE & PATTERSON ARCHTS.

EXECUTED BY



THE GORHAM CO ARCHITECTURAL BRONZE
FIFTH AVENUE NEW YORK.



"GLEN EYRIE," COLORADO SPRINGS, COLO.

Frederick J. Sterner, Architect.

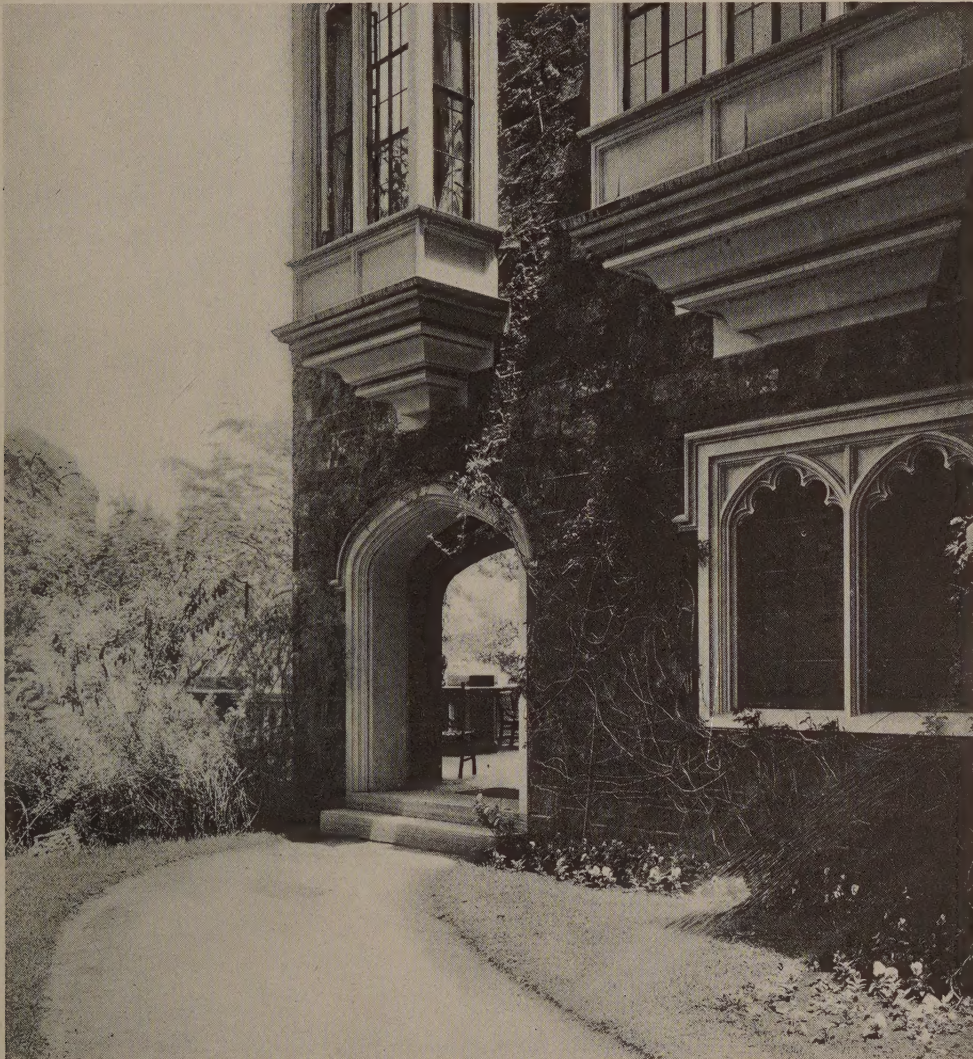
ARCHITECTURE

THE PROFESSIONAL ARCHITECTURAL MONTHLY

VOL. XXXVII

JANUARY, 1918

No. 1



Detail, "Glen Eyrie."

Glen Eyrie

Frederick J. Sterner, Architect

By Theodore M. Fisher

GLEN EYRIE, an estate of more than two thousand acres near Colorado Springs, has long been one of the show places of the "Pike's Peak Region." Its late owner, General William J. Palmer, devoted most of the later years of his life to the development of the sheltered valleys, among

the foot-hills which comprise it, into one of the most delightful of country places.

The mansion itself is patterned after the county-seats of the English nobility. It is veritably a manor-house of the Tudor period reproduced with careful attention to



"GLEN EYRIE," COLORADO SPRINGS, COLO.

Frederick J. Sterner, Architect.

accuracy in the smallest detail. Wishing to duplicate not only the architectural features of, but as well the charm of age possessed by, its English prototypes, General Palmer conceived the idea of using moss-covered stone which would reproduce the tone of an old building. Hundreds of workmen, therefore, were sent into the mountains to select rocks of comparatively uniform size. These were carefully packed in straw and hauled to the site. No visible part of these was touched with chisel and mallet. The roof was brought from England, from the ruins of a picturesque and ancient church in a country village. Time has mellowed the tile into the softest of gray-greens.

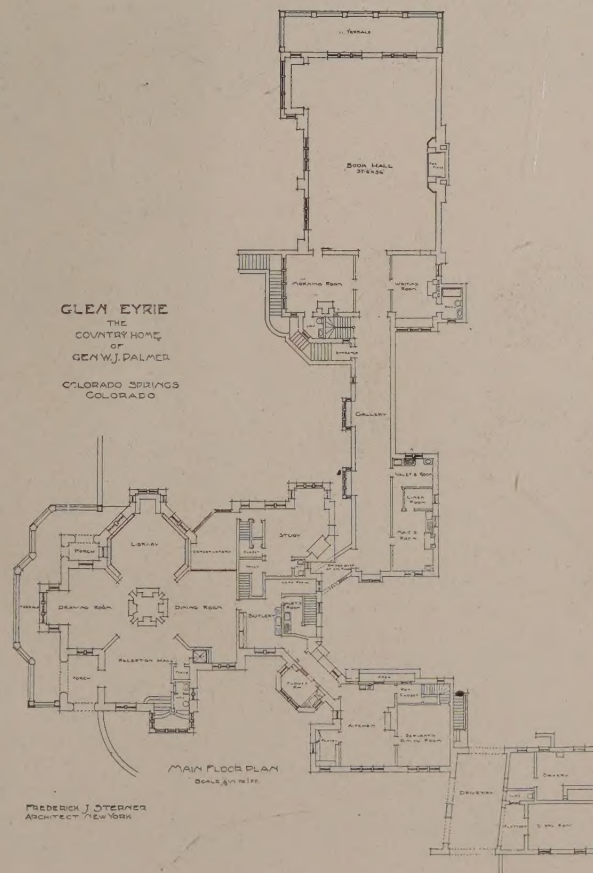
As the plan of the main floor indicates, the ground-plan of the house is decidedly irregular, being divided into three main masses: the central living portion, with service part in an adjoining wing, and the book-hall section, which is attached to the main section by a long gallery.

On the ground floor under the main part of the residence are bowling-alley, billiard and pool rooms, and a small Turkish bath.

The second floor contains nine masters' bedrooms and five baths. Each room has an individual safe concealed in the panelling of the walls. On this floor also are two valets' rooms, a sewing-room, and a cleaning and pressing room. The gallery extends to the book-hall, which at this level has a balcony with seating capacity of a hundred persons. The third floor has seven masters' bedrooms and four baths, and the fourth four bedrooms and two



Detail, "Glen Eyrie."



baths. The servants' quarters are also on this floor, consisting of eight rooms and two baths. An electric elevator does service from the first to the fourth floors. The main part of the mansion ends with the fourth floor, but an easy flight of stairs leads to the tower above, where there is an octagonal studio 24 by 26 feet and a 16-foot ceiling.

The most distinctive apartment in the residence is undoubtedly the great or book hall, which occupies the large attached wing. This is 37 by 58 feet in dimension, with a ceiling height of 25 feet. Like much of the remainder of the house it is finished in old panelled oak, with huge rafters and beamed roof. The fireplace is of white cut stone in Gothic design. Here as elsewhere the furnishings are for the most part antiques of the Tudor and other periods. The floor coverings throughout are without exception oriental rugs.

The estate has many out-buildings, including a rustic entrance-lodge, dairy, ice-plant, power-plant, clubhouse for the servants, as well as greenhouse and farm-buildings.

A private telephone system connects every building and every part of the estate with the central residence. The power-plant furnishes steam-heat, hot water, and light to all the near-by buildings, runs the house elevator, and operates the refrigerating-plant, the vacuum-cleaning system, the dairy, and the laundry.

The estate has its own water-system with many reservoirs and pipe-lines not only for domestic use, but to supply irrigation to the several hundred acres of farm-lands.

The Gothic Way

By A. Kingsley Porter



III

THE peculiar greatness of Gothic art, in so far as it is susceptible of analysis, lies, I should say, primarily in its other-worldliness. It is distinctly immaterial. In this it is the antithesis of Greek art, which is clear-cut, tangible, which contents itself with idealizing the beauty of the world. The godlike Homer raises us to the grass-grown regions of Olympus, where Apollo stalks along, and his silver arrows clang in his quiver; but, although Homer lifts us to the mountain-tops, he never transports us into the skies. His Apollo, beautiful as he is, after all is merely a glorified man. Certain poets, such as Goethe in the second part of "Faust,"—to name a notable example,—transport us into a dream world where forms of the earth are softened and transformed by a poetical mist into shapes of supermundane loveliness. Admirable are the achievements of such artists, and we seem, under their spell, to float in a lovely dream of unreality. Yet these poets too, in the last analysis, never really succeeded in creating the atmosphere of another planet. We seem to be looking through fantastically colored glasses, but the images about us are still mundane. The most difficult task which any artist can set himself in any medium is to express that of which the earth gives no prototype, to rise from the terrestrial to the heavenly, to create from his imagination the delights and emotions of Paradise. Many

have attempted this supreme task, and many have failed. Even Milton, in his "Paradise Regained," never for an instant rose to the height of his great argument. Fra Angelico might have succeeded had it not been for his sentimentality. It is, to my knowledge, only twice that man, who is forever tugging away at his own boot-straps, has completely succeeded in imagining and expressing the conception of the other world. Once it was Dante, not in the "Inferno" or "Purgatorio," which are from every point of view inferior, but in the "Paradiso" alone; the other time it was the artists of the Île-de-France when they created Gothic art. Perhaps the finest line of criticism that has ever been written upon the mediæval church is that of Suger, abbot of St.-Denis in the twelfth century and himself one of the creators of the new style. When his abbey had at last been completed, the soaring vaults walled in, the windows filled with glass, he returned to his library and wrote: "When I enter the church I seem to find myself in a region which, if not Heaven, is neither yet entirely of this world." Just there lies the greatness of Gothic architecture. It is a mighty genius, a colossal imagination, which has the power to transport us from the mundane to the supermundane, from the material to the immaterial, from the tangible to the intangible.

There remains the ideal of obedience. The present is the age of the individual; the mediæval period was the age of the community. Obedience in the mediæval conception

signified the renunciation of the desire to realize one's own personality in favor of the resolution to realize the ideal of the age. Thus all mediæval labor was bent toward the same end. The work was everything, the worker nothing. We know the name of but few artists of the Middle Ages. These men who created such idyllic beauty had apparently little desire for personal glory. They left their work to rejoice future ages; but they cared nothing for handing down their names to posterity. They were glad to be forgotten; the work of art alone counted. How different is this from the modern point of view, where each individual works only for his own fame, his own glory, where every tenth-rate dauber signs his worst sketch in glaring letters!

A passage in the "Lives" of Vasari is singularly significant of this difference of point of view between the mediæval and the Renaissance artists. It occurs in the *proemio* of the life of Arnolfo di Cambio, and I am sorry to have to render it, as it is singularly difficult to translate. In effect, Vasari, after having catalogued the great Gothic churches of Italy, and after having remarked that he had been unable to find out who were the architects, exclaims: "How boorish (*goffezza*) and how little desirous of glory were these artists, who took no pains to transmit to posterity their names!" Of course Vasari could understand this no more than he could understand anything else of the Middle Ages.

It is the same thing in regard to the donors. Occasionally in a Gothic church a modest shield, tucked away in some out-of-the-way corner, will bear the coat of arms of a noble family or trade corporation. Almost never are portraits represented. In the typical Gothic cathedral we search in vain to discover who were the archi-



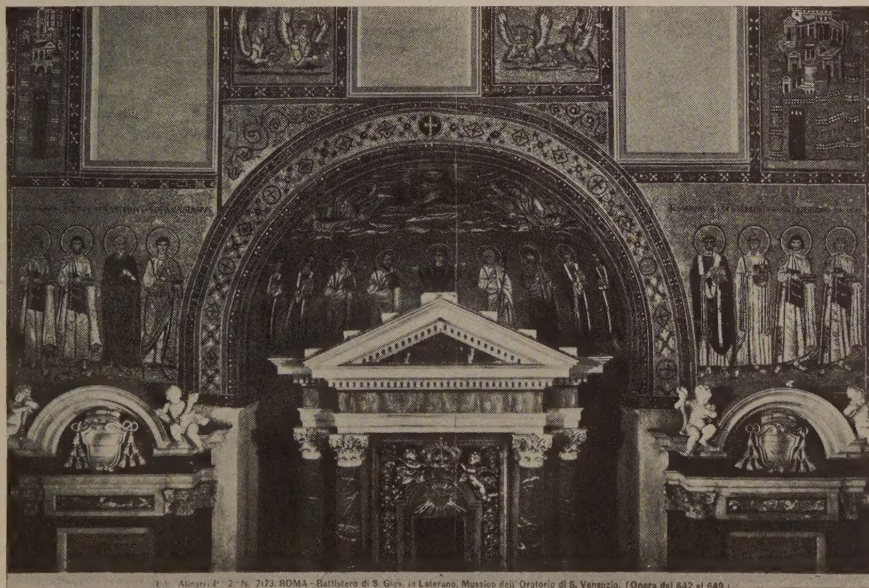
Valcabrère (Haute-Garonne) statues of portal.

texts, who the painters of the stained-glass windows, who the carvers of the sculptures. It was very different in later times, when the windows bore representations, not of saints and prophets but portraits of rich lords and pompous prelates.

I cannot resist the temptation to turn back once more to the Sistine Chapel, to contrast, in this particular, the art of the Renaissance with that of the Middle Ages. At the papal court of Rome, the great centre of culture and learning in the fifteenth and sixteenth centuries, we might, indeed, expect to find artists working with a certain intellectual finesse. We are not unprepared to find them painting subjects less obvious and less hackneyed than those which they were using elsewhere and which even present more or less the character of intellectual puzzles. And such was, indeed, the case. Bearing in mind the poetry of mediæval philosophy, the intellectuality and sincerity with which the mediæval artists glorified their God and their religion in the

provincial churches of far-away France, let us now see what the Renaissance artists did in the private chapel of Christ's vicar in Rome, the centre of culture and Christianity. Botticelli painted in the Sistine Chapel, directly in the centre of the wall and opposite the throne upon which the pope sits when celebrating the offices, a very famous fresco. Every one knows it, although but few are acquainted with the sub-

ject. It is sufficiently obscure and, I suppose, intellectual, so that it long escaped all interpretation. A modern critic has, however, discovered it. It is the illustration of several verses in the book of Exodus in which are described the Jewish rites in connection with cleansing the leper. Why was this particular passage picked out for illustration? It was because the pope



Alinari, P. 2, N. 712. ROMA - Battistero di S. Giovanni, in Laterano, Museo dell'Oratorio di S. Venceslao. (Opera del 842 al 848.)

who was then reigning—Sixtus IV, I think it was—had built in Rome the famous hospital of S. Spirito for the lepers. Whoever selected the theme, therefore, paid a subtle compliment to the pontiff by alluding to this fact. That was the reason this particular subject was chosen. The glory of God was a matter of no concern. In this same picture, in the background, are introduced three other scenes representing the three temptations of Christ. Was it for some subtle theological or dogmatic connection that these events of the New Testament were combined with one of the Old Testament with which they appear to have so little to do? Not at all. The temptation of Christ was introduced in order that the artist might have the opportunity to represent the devil talking to the Saviour on the pinnacle of the temple, and it was desired to show this temple in order that the artist might depict it in the architectural forms of the recently completed hospital of S. Spirito, thereby again alluding to the generosity of the pope and flattering his patron. The same spirit breathes throughout the decorations of the entire Vatican. The work of Raphael in the famous *stanze* is permeated by it. The frescos, one and all, reflect, not the praise of God, but the glory, the temporal power, the princely magnificence, of the popes. No secular princes ever vain-gloried in their lineage and prowess as did these proud pontiffs of the Renaissance. At times the flattery of the artist becomes almost nauseating. Witness the "Incendio," the "Heliodorus," the "Attila," in which are represented historical events of sacred character, or miracles, but in which the introduction of the portraits of the reigning pope, Julius II or Leo X, makes it clear that the allusion is to contemporary events, the successful political intrigues, the land-grabbing and oppression of weaker states, by the unscrupulous pontiffs. It was a singular idea to make Julius II and Leo X, the most worldly, the most cynical, of princes, masquerade as saints and heroes of sacred legend.

Such is the contrast between the spirit of mediæval and of Renaissance art. In one we have the glorification of God, in the other the glorification of man. Renaissance art acquired the human, but it lost the divine.

Moreover, the spirit of obedience is manifested in the mediæval cathedral in an even more subtle way. There is no conflict between the different arts. Sculpture and painting

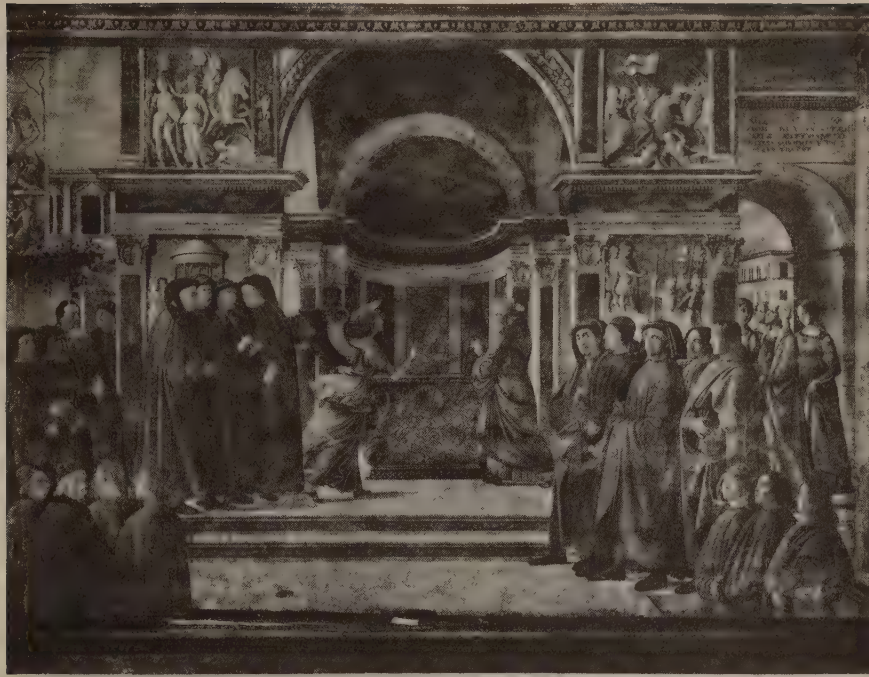
are the dutiful handmaidens of architecture, lending their beauty to increase her effects, and thus combining to make of the cathedral one complete and harmonious whole. This architectural restraint, far from being a source of weakness to the accessory arts, seems to have operated to stimulate them to great achievements. In the Renaissance, sculpture and painting, fired by the new spirit of individualism, rebelled from architecture. They must exist for themselves alone. It is not clear, now that they are freed from architectural restraints, that they have become either more expressive or more decorative than before. In fact, this declaration of independence has been the undoing of all three arts. Because of their insubordination, architecture has been obliged to do without painting and sculpture, of whose aid she has great need. Painting and sculpture have thus lost their best and most useful field of activity. To-day we have quantities of painters and sculptors, often not without talent, producing works, finely individualistic without doubt, but for which no one cares. Their labor adds not at all to the

joy of the world. If it were only employed, as formerly in the service of architecture, these minor artists might render a real service to humanity, at the same time finding a more adequate expression of their own artistic emotions.

The ideal of obedience is also reflected in the strong tradition of mediæval art. It is the modern conception that the individual should be left free to the last degree to develop his own nature; that the artist should be untrammelled by any laws and conventions. In the Middle Ages, on the other hand, the spirit of the time was so



Jambs of southern portal.



(Ed. Alfani) N.º 3980. FIRENZE — Chiesa di S. Maria Novella. Il Partorito Zaccaria nel Tempio. (Dom. Ghirlandajo).

strong that an individual never emerged above it. In the Gothic cathedral we seek almost in vain to discover the hand of any one man of superlative excellence. Such a system seems to us to cut the wings of genius, to prevent flight into the highest altitudes. We think of it as sacrificing the exceptional few to the mediocre majority. If, however, we apply that pragmatic test upon which the modern world lays such weight, we shall be forced to recognize that no individual modern has attained greater artistic excellence than the collective Middle Ages. In addition there is a singular evenness of attainment in mediæval art. The thirteenth century not only produced a few buildings which equal the best produced at any other period, but everything executed at that time was on nearly the same level of excellence. The strength of the mediæval tradition, the force of the spirit of obedience was such that all artists were carried along with it. No one could produce bad work. To the individualist of the twentieth century this condition of affairs is unthinkable. Yet the fact remains that in the Gothic period the most remote country churches, the most insignificant buildings, show the same

exquisite detail, the same unerring sense of beauty as the great cathedrals.

Thus the mediæval builders pursued their strange ideals of poverty, chastity, and obedience. Small wonder the materialist modern shrugs his shoulders and passes on.

Art as History

ART, in its many forms, is the most reliable history of a time, largely because it does *not* deal with concrete facts which, so far as absolute and final truth is concerned, are of the nature of statistics, proverbially said to be of the third and highest degree of lies. The modern historical method deals with facts, which are further emphasized in their error by the application of a mechanistic psychology, and the result is about as illuminating as is the method of the "higher criticism" when applied to the Scriptures, or that of Morelli in the case of attributions in painting. If you would know what sort of men and women they were who lived at any time—how they thought and felt, and why—go back to their art; to their architecture, painting, and sculpture, their poetry, drama, and music, their industrial arts, their liturgies, and their ceremonial.

From "The Substance of Gothic," by Ralph Adams Cram.



St. Bertrand de Comminges (Haute-Garonne) Cloister.

Architects and Their Practice

By "*Experience*"

ONE of our most eminent architects, a man of wide experience and mature years, once said to me that in his opinion no one who desired to practice our profession independently should attempt to open an office unless he had an income that was enough to live upon and pay his office expenses. "Better remain an employee with a good salary all your life," said he, "than to struggle along in the way that I know scores of men have been and are doing to-day." Now, this was a pretty drastic statement, but he was a man who never hesitated to express his convictions freely; and that he honestly believed just what he said I do not doubt; that it contained a vast amount of good common sense I am bound to admit.

His contention was this—that even with the most prosperous of us there are always lean years, and long periods when we have little or nothing to do, and consequently no income from our business, while the expenses of the office and home never stop. The practitioner, be he young or old, who has not the capital to tide over these shoal places must necessarily run in debt, endure great privations, or be forced to the wall.

Competition in our business is keen—keener, in these latter days, it seems to me, than formerly, and unless a man, no matter how talented he may be, has influential friends or is fortunate enough to become the architect of some great estate or corporation long years of weary waiting and ceaseless struggle are bound to occur before he reaches (if he ever does) the plane for which he strives.

Most all of us know of men of undoubted ability and splendid attainments, who have never even had a chance to show what they were capable of doing.

I recall one case particularly of a young man who left his small native city and established himself in a metropolis. He was a man of great ability, well connected but practically unknown; fortunately he was well supplied with the world's goods and could and did hang on. He secured a certain amount of small work, consisting mostly of country houses. He entered innumerable competitions and tried in every legitimate way to obtain a large commission, or what is known as a good job. After seventeen long years of struggle his efforts, more by accident than anything else, were crowned with success, as a million-dollar competition was awarded to him and his reputation was made. But how many of us could have waited and struggled, and lived as he did? Very few, I opine.

Now this man became famous almost in a day, and from the time that he won that competition his path, so to speak, was strewn with roses. Commissions came to him without the asking, and his services were eagerly sought for; yet he was not a bit more capable of doing good work at that time than he had been at any time during those long, lean years, and if he had not been able to hang on and maintain his office he would never have been known as one of America's great architects.

All this emphasizes the opinion of my friend—that a man, to become a really successful practitioner, should have an independent income.

An old office-mate of mine, of whom we all predicted great things (but who, unfortunately for the architecture

of this country at least, married a lot of money and so never had to work to keep the wolf from the door), once said that he firmly believed that no architect could do his best work until after he had passed his fortieth year, his argument being that at that age he had found himself, had gotten over the enthusiasm of youth, knew his capabilities, and had acquired experience enough to know how to handle them. Here also we find sound common sense, expressed perhaps in a blunt way, but nevertheless true. We all make mistakes and sometimes blunder along the road of life in the most erratic manner; few of us but what have skeletons (architectural) carefully concealed, creations of our early practice that we are very careful not to acknowledge unless forced to.

One of the most successful men of the day told me only a little while ago that he would go blocks out of his way to avoid passing some of his early buildings, which he said he thought were fine when he did them. "What amazes me," he continued, "is how in the world I could have ever done such atrocious things." I can fully appreciate his feelings. There is no better educated or trained man in our profession than he of whom I speak, and his confessions forcibly bear upon the assertion of my friend who claims a man must be at least mature to be able to judge properly what is really good and bad.

Many wealthy young men, fresh from the art schools of Europe and travel, are able to open and maintain elaborate offices without any particular concern about the expense of maintenance. This is a most unfortunate condition and, in my opinion, detrimental to the best interests of architectural practice. These men spend money freely, are devoted to society, catering in every way to its whims, and, on account of the money they have, can afford to take part in any competition that they can succeed in obtaining an invitation for. They do little or no office-work themselves, delegating this to a corps of assistants who may or may not be competent to handle it. Men of this type have been called by a witty friend "butterflies" of our profession, as they flit through their business career in the most nonchalant manner, gathering honey from commissions where they may, but not being particularly disconcerted if they fail to obtain even a meagre supply.

Another class of young men, who frequently enter the architectural field directly from the architectural schools, are those who have powerful friends, who give them, or obtain for them, commissions, sometimes of magnitude, and thus enable them to start in business.

I have never been able to understand how people who would not for a moment think of employing young and inexperienced physicians or lawyers to handle their cases will put into the hands of young architects important commissions. Surely one requires quite as much judgment and skill as the others, and oftentimes pertains to our personal comforts far more. Yet we all know that this is done continually, in many instances, I am sorry to say, with most unfortunate results. In their enthusiasm young practitioners are very apt to do things that in their mature years they deplore. Their client's money is spent unnecessarily and, sometimes at least, foolishly.

To illustrate, not long ago I was in the modelling-room of a prominent terra-cotta company and noticed a very beautiful design for a large panel. The composition was good, the detail was exquisitely delicate and more than usually refined. To the superintendent I expressed my admiration, and he answered: "Yes, it is all right as you see it, but where it is to go it is no good. Can you believe," said he, "those panels are to be placed between windows on the nineteenth story of an office-building, and no one, unless he uses a telescope, will be able to see them. They are young architects who are doing the job, and I called their attention to the fineness of their detail but only got snubbed for my pains. They will know better," he sagely added, "in a few years. Now, those panels cost the owner of that building a lot of money; but we don't care, it's business for us—we are bound to make what architects want."

I was curious enough to visit the structure after it was completed and found what the superintendent had said to be true. It was impossible to see one bit of that beautiful detail from the street, and consequently it was a foolish expenditure to have placed it there.

To still another class which is quite numerous in our profession and which obtains a lot of work belongs the popular man, the all-round good fellow that caters to everybody, is affable in his manners, especially to the ladies, smooth in his business relations, and by the skilful use of these attributes manages to cover up a multitude of shortcomings. Men of this class usually have no marked ability, yet many times succeed where the blunt, outspoken, really talented man will fail. One of this class whom I recall once said, when I asked him how he got by with the mistakes that I knew frequently occurred on his buildings: "Oh, I jolly them along," said he, "let them sputter and swear, and laugh it off in one way or another; I rely on their forbearance and good nature to get me out of scrapes that I admit I get into." Now, people may stand this sort of thing for a while, but such methods will not last; sooner or later a man's calibre is bound to be found out and there comes a day of reckoning.

There comes to my mind, as I write, one of the most genial men I ever knew, who did a large amount of country-house work all over the East; yet this man never retained his clients—it was touch and go in his case continually, one dose of his methods being sufficient to cure any client of ever wanting another. On the other hand, I have known men to hold their clientage for thirty years or more, in spite of the common saying that "An architect was never known to do more than three jobs for any one person."

This seems to me absurd, for I can see no good reason why an architect, if he is competent, should not hold his clientage just the same as the lawyer or physician.

It is said with truth that it is impossible for any one man to know and attend to every branch of work that enters into the composition of our great modern buildings, and that he must delegate a large portion of his duties to his subordinates. This is undoubtedly so, but he should nevertheless be so trained and experienced that he will know at once, in every department of work, when his ideas and instructions have been carried out and whether the work has been done properly or not.

Our best and most efficient railroad presidents and superintendents are those who have risen from the ranks, and it is the same in many of our large manufacturing concerns and great business corporations. These men have been through all departments of their business and know intimately every detail of it, and consequently are able to correctly judge its merits or demerits. And this is what the

true architect should be qualified to do, but, in innumerable cases that I have known of, men of my profession have fallen far short of this standard.

I have time and again seen all kinds of work that entered into the erection of a building done in an improper manner, and have been told that it was approved by the architect who had charge of the work. That there was any collusion between the architect and the contractor who did the work I do not for a moment believe. Usually it was simply a case of ignorance on the part of the former. Contractors are quick to discern and take advantage of this most vulnerable point in the architect's armor, to his discomfort and the ultimate dissatisfaction of his clients. Knowledge of this kind cannot be learned in architectural schools or gleaned from books, but must be acquired from practical experience and study of work actually being done.

The recognized importance of this kind of training is abundantly indicated by the number of young men of to-day who are taking menial positions with railroads, large manufacturing concerns, and great corporations, and gradually working their way up into such positions as their capabilities show that they can fill; also by the establishing of trade-schools in all of our large cities, the number of which is constantly increasing.

If the young man who is training himself for an architectural career would adopt a similar course, it would in my judgment be of inestimable value to the profession at large, to their clients, and to themselves.

But very few in the first place are willing to spend the time to do this, or in the second place demean themselves, as they consider it, by association with and working beside the lowly mechanic.

How then can the young and inexperienced man enter into practice and obtain this knowledge? By associating himself with older and experienced practitioners and by remaining with them either until he succeeds to the business or until he has become thoroughly familiar and well-grounded in every branch and detail of the profession. Such a course may be irksome to the young enthusiast, who may consider the older man lacking in many of the essentials which visionary youths think they possess. Honest criticisms may not be considered just, or be taken in good part, but if the younger man has sound judgment and really wants to know the practical side of his profession from every angle, I know of no better, quicker, or easier way to acquire this proficiency than to become the junior partner of some old practitioner. Let the young man be lenient with the older man's idiosyncrasies, bear with his hobbies; it ultimately will be greatly to his advantage, and while at the time he may be irritated, if he has patience he will, as time goes on, come to realize how much he has gained and how great a benefit to his career the older man has proven.

It is very hard for the younger generation to understand or to admit any such doctoring. A man, after he has arrived at his real years of discretion, is apt to be called and considered by the younger set an "Old Fogey." You will hear it said that he is behind the times, is not up to date, etc. Now, in point of fact I know many men well along in years who are "quite up to date" in all matters pertaining to their profession; who are in their prime as far as their mental capabilities are concerned and who are capable of doing better work than at any other time in their career. Really all this is simply a matter of evolution; the man of to-day who considers his elder "passé" will in a very few years be called the same by those he may now trot on his knee.

Cost of Labor and Cost of Building

A Few of the Reasons Why the High Cost of Labor Does Not Necessarily Mean an Increased Cost of Building

SAN FRANCISCO, CALIFORNIA, December, 1917.

TWENTY-FIVE years ago, when the hod-carrier worked ten to eleven hours a day for \$1.25, laboriously carrying the hod up ladder after ladder, a fair measure for a day's work was the handling by him of about fifteen hundred to two thousand bricks. To-day, with hod-carriers working eight hours a day, receiving a minimum wage of \$5, a quick-running construction hoist, to say nothing of the modern mortar-mixing machine which eliminates a large part of the cost and increases the quality of the mortar, is substituted for the unconquerable and painful slowness of the ladder. Thus it comes about that the present-day laborer in eight hours handles ten to twelve thousand bricks for \$5, plus the cost of operating the hoist, as against the old ten-hour day at \$1.25, handling a maximum of two thousand bricks, plus the cost of the ladders and the loss of time. The loss of time is a serious item and is the basic principle of discount and interest.

The same thing applies to the cost of nearly every other economic element in building construction. The concrete-mixing machine, not only with mechanical precision insures a perfect mixture, but does it much more rapidly and at less cost than the old unreliable and expensive method of mixing concrete by hand.

The pneumatic drill or hammer drives rivets with ac-

curacy and safety at one-tenth the cost of the former slow, cumbersome, unsafe, and expensive method of the hand driving of rivets or bolting together the different structural members of a steel frame that have to be assembled in the field. The pneumatic drill and other mechanical tools cut, carve, and fashion three to four times more in cubic feet of stone work than was formerly accomplished by hand with artisans receiving less wages and working longer hours. The sand-papering machine, the floor-polisher, the portable sawmill, and hundreds of other devices used in building are all tributary, not only to rapidity in construction, but to economy in cost. This more than equalizes the higher wages and shorter hours of labor now prevailing.

Therefore, if under old methods a building such as the Mills Building in San Francisco or any other modern office building cost at that time as much or more than identical buildings would cost to-day, would it not be safe to assume that such buildings in the future, with even higher wages and shorter hours, owing to still further improvements in methods, will not cost more? One safe and reliable prophecy is that present-day costs will never be less.

Of course, labor-saving devices disturb the economic world, the purchasing power of the dollar is ever changing; but business acumen is always rewarded when it recognizes and meets the conditions of the moment.

WILLIS POLK.

On the Honor Roll

ARCHITECTURE,

New York, N. Y.

Dear Sirs: Of the men who were members of the senior class in architecture here last year, the following hold commissions in various branches of the service:

GARDNER, NEIL N. 2d Lieut. C. A. C.
HUEBNER, L. H. Paymaster U. S. Navy.
IRBY, BENJ. E. 2d Lieut. Infantry.
JOHNSON, OLAF K. 2d Lieut. C. A. C.
KERBOW, HERBERT R. 2d Lieut. Infantry.
MILNER, DRINKARD. 2d Lieut. Marines.
NEWTON, THOMAS M. Maj. Deputy State Architect, N. Y. Headquarters American Exped. Force in France.
PETERS, NOAH L. Capt. O. R. C.

Two other members of last year's class—Jopling, Homer A., and Burkett, J. M.—were refused admission to the training-camp, one on account of being too light and the other on account of a bad heart.

In addition to these, one of last year's juniors, W. F.

Prime, has been commissioned 2d Lieutenant O. R. C.

We have records of former graduates as follows:

BARNITZ, R. B., 1912. 1st Lieut. Cavalry.
BROWN, J. D., 1916. 2d Lieut. U. S. Infantry.
BURTON, ALLAN, 1913. 1st Lieut. Engineers.
EASLEY, C. M., 1916. Capt. 2d Texas Infantry.
FOUNTAIN, E. J., 1913. Capt. Engineers, O. R. C.
GEREN, P. M., 1912. 1st Lieut. Engineers, O. R. C.
KNOX, GEO. P., 1914. 1st Lieut. Infantry.
MANSFIELD, B. J., 1912. 2d Lieut. U. S. Marines.
RUTAN, WILTON L., 1915. Capt. 3d Texas Infantry, T. N. G.
WEAR, ANDREW H., 1914. 2d Lieut.

I have myself applied for a commission in the Engineers, O. R. C., but on account of being over age I have been notified that I will not be taken on unless the emergency becomes greater than it seems to be at present.

Yours very truly,

R. ADELSPERGER, A. I. A.,

Professor of Architecture,

Agricultural and Mechanical College of Texas.

A New Building to a Bank Is a Good Business Investment

THE value of new banking quarters was recently made the object of a nation-wide investigation. A questionnaire, touching on the following points, was sent to a list of financial institutions which had of late either erected new structures or materially improved their old banking quarters.

1. What, if any, is the advertising value of a new building or improved quarters?

2. Other things being equal, do you believe that the bank with the new building is the one most favored by depositors?

3. Have deposits increased or decreased since the occupancy of the new quarters?

4. Would you attribute all or any part of this increase, if any, to the attraction of the new quarters?

With but little variation, and only slight reservation or exception, all of the banks from which an answer was received replied in the affirmative to each of the questions.

The result of this investigation affords evidence that there is a real commercial value in properly housing a banking institution. The obvious answer is: Build now!

Editorial and Other Comment

Competition Programmes in the Schools and Ateliers

THE average architect looks with a certain amount of wonder at the programmes for competition and study which are given out in the architectural courses at our universities and by the beaux-arts societies. Of course, after one has gotten used to seeing a man of eighteen or nineteen developing schemes for national capitals, architectural shipyards, and the like, this sense of surprise is somewhat dulled; if one asks the instructors or professors why such subjects are selected, one receives almost invariably the same answer—that these things give to the men greater opportunity to display their ability than do smaller and more specific problems. They also assert that, as most men work as draftsmen for a considerable time before becoming architects themselves, they have opportunities in the offices to study the smaller and less important schemes, while the fact that they have had in school the larger and more magnificent problems will fit them to engage in competitions and to undertake work for which office duties would never train them. Perhaps, too, the endeavor on the part of the instructors is to give the man interesting subjects, and of course to the architect the bigger the thing is, as a rule, the greater the interest which one feels in it; but it seems, to the writer at least, far more important to teach the student that small things can be as perfect and represent as high a degree of artistic achievement as larger ones.

It seems also that a closer connection of the school problem with the problems which one encounters in practice would be better. It is not meant by this to indicate that school problems should consist mostly of country houses, with an occasional larger problem thrown in; to digress, it is even to be doubted whether school training is of very much assistance in designing country work. The country-house problem is so dependent upon conditions of site and in itself varies so greatly that it seems unwise that much time should be spent upon it in college, and as the principles of good plan in country-house work are those in work of all other kinds, it is unnecessary to study the general problem of plan as applied specifically to this one instance. On the other hand, it seems equally unnecessary to attack the problem of plan through an assemblage of buildings so great that but very few architects would ever have an opportunity to design, when the same end can be served by a problem which would be encountered by at least a large minority of practitioners.

Nor does the writer believe that the average school problem contains a sufficient number of limiting conditions. The design of every actual building is to a large extent determined by circumstances, either of size or of cost or of architectural-plan requirements on the part of the owner, and while it may be desirable in the interests of brevity to simplify such requirements, at the same time this in the schools seems to be carried too far. The school programme is perhaps not over three hundred words, and may pretend to outline the requirements of a naval arsenal or a State capital. Actual conditions are far different; take, for example, the programme of the New York County courthouse competition. Here was a pamphlet of perhaps one

hundred pages with very minute requirements as to each room in the building, and certain general requirements as to the correlation of the functions of these rooms; all these things were mandatory, while a number of lesser features were recommended as desirable. Here was a real problem, and while of course it was obviously unsuited to the architectural student, its only difference from the school problem was in the length of time involved in its study because of the minuteness with which particular items were described. It may perhaps be well to permit the young man to work out his cherished schemes without too many restrictions, and yet on the other hand it is probably buildings on a small scale with definite requirements that instruct him far better in the method of attack in competition work than do enormous problems loosely described and not at all comprehended. Even disregarding the absence of restrictions or of limiting conditions in the school or atelier problems, they seem to be often of a kind which cannot be taken seriously, and it is difficult for the practising architect to criticise the type of problem without at the same time criticising the problem itself.

Take for example one of the recent fellowship competitions; its programme called for a sort of sanitarium of the resort style in the foot-hills of a range of mountains, somewhere in the South, on a piece of property seven hundred by a thousand feet. The central building was to be over twenty stories high, with wings of over ten stories, and loosely connected with this main building were to be twenty-five or thirty cottages. The problem of the design of such a group does not commend itself to the mind of the writer as one liable to bring forth a winning solution for a man of a serious and a practical turn of mind; it needed some wild dreamer to take seriously a scheme as absurd as it is tremendous. Likewise, the restrictions or conditions seem as unsatisfactory as the problem. We have, it is true, in this country a number of combined health and pleasure resorts, such as Virginia Hot Springs and White Sulphur, and some of the older spas in the South, and it is conceivable that such a problem might sometimes occur in actual practice. On the other hand, the conditions vitiate the probability of a man ever being called upon to undertake such a piece of design. It is inconceivable that a large summer resort in the mountains would be built on so small a piece of property. Most certainly tennis-courts, a golf-course, and even private grounds for riding and driving would be included. It is extremely unlikely that tall buildings would be required, and certain that they would never be desirable. Such towering architecture would be banal in the extreme in the foot-hills of the Appalachians; yet this was the problem which was offered for a fellowship.

Perhaps the best competitions in bringing out actual talent are those which have been conducted by the manufacturers through the architectural magazines. The programmes for these have been for the most part gotten up by members of the juries, and the juries have been composed of men of the highest attainments in the architectural profession. The problems have not been tremendous in character, the restrictions have been those which would be encountered in ordinary practice, the interest which they have aroused has been extreme, and the benefits which they

have conferred upon the students of current work have been great. A number of competitions have had for subjects country houses of various sizes, costs, and materials; other competitions have been for moving-picture theatres, combined office and loft buildings, small banks, churches, and other structures of similar size and diversified character. These programmes have been of absolutely different character from the ones generally given out by the schools. In the first place, they have been buildings of moderate size, with requirements which could be given in detail and studied with care in a brief time. They have resembled the competitions which a man encounters in actual practice, in every respect save for the fact that they were not to be built (although in many cases the solutions have been sufficiently good to procure for their authors employment by people who had similar problems to meet).

In the schools, during the first year, the problems are generally all concerned with the study of the orders, but from these there is liable to be a jump to building of considerable size as subjects of competition, and while the writer doubts the advisability of ever including except as thesis work, problems of great magnitude, certainly the earlier problems should be small in size and of simple character. When the LeBrun Scholarship was first established, its donors, practising architects of great ability, felt this so strongly that in the deed of gift establishing the scholarship they demanded that the subject be practical, and while the juries on the LeBrun Scholarship have differed widely as to the interpretation of what is a practical problem (or perhaps have differed only as to what sort of a practical problem should be given) the LeBrun Scholarship has, nevertheless, been of considerable value as a model for other scholarships.

The writer would like to see an attempt made by the universities to pick out things which are not being well done, and are being constantly done, as subjects for competitions. Here a real service would be rendered to the architectural profession, besides the educational value of compelling the student to use his own ability to design instead of looking up some previous answer in some book of photographs or drawings and copying it as closely as conditions will permit.

An example here in New York might be the design of an elevated-railroad station. A handsome station of this kind should not be an impossibility, and yet there is not a good or even a passable example thus far, either on the old railroads or on the newer elevated extension of the subway systems. This is a problem which is intensely practical and yet well adapted to school study.

Instead of such a problem as the health and pleasure resort above mentioned, one might ask for the plan of a suburban hotel and apartment-house, or a similar building in a small city. This is a type of building now constantly increasing in number which has been well done only a few times and which is as a problem extremely interesting. In Bridgeport, for instance, is the Hotel Stratfield, a combination of apartment-house and transient hotel. The entrance is on the main street and the back of the building is upon a sloping hillside with large trees and pleasant grounds and the general look of a country-house place. The architects of this building put all their sleeping-rooms on the main street, using a one-story extension in the rear for dining-rooms and sitting-rooms. It might be desirable to enter the building from the main street, but certainly the bedrooms should have been to the rear, and one would think that any architect with training sufficient enough to convince a client that he could design a hotel would have known better. Yet it is probable that the average undergraduate

of an architectural school would have produced a quite similar plan, and certainly he has never had any such problem presented to him—it is too practical.

Might Just as Well Build Now—High Prices Will Remain

THE price levels of labor and building-material of before the war have gone forever. They will not return with the close of the war. The rates of to-day will continue after the struggle has been decided, and builders and real-estate men generally may as well get used to paying the current rates, for they will not be very much lower. This is the opinion of an architect who bases his views on the effects which the Civil War had on building-trade wages of those times and construction-material prices. This man was a practising architect in Boston at the time of the great civil strife and he said that the jump in building costs was equally as great as the increase which builders are complaining of at the present time and which has halted construction work in this city. In those days steel was unknown to building construction.

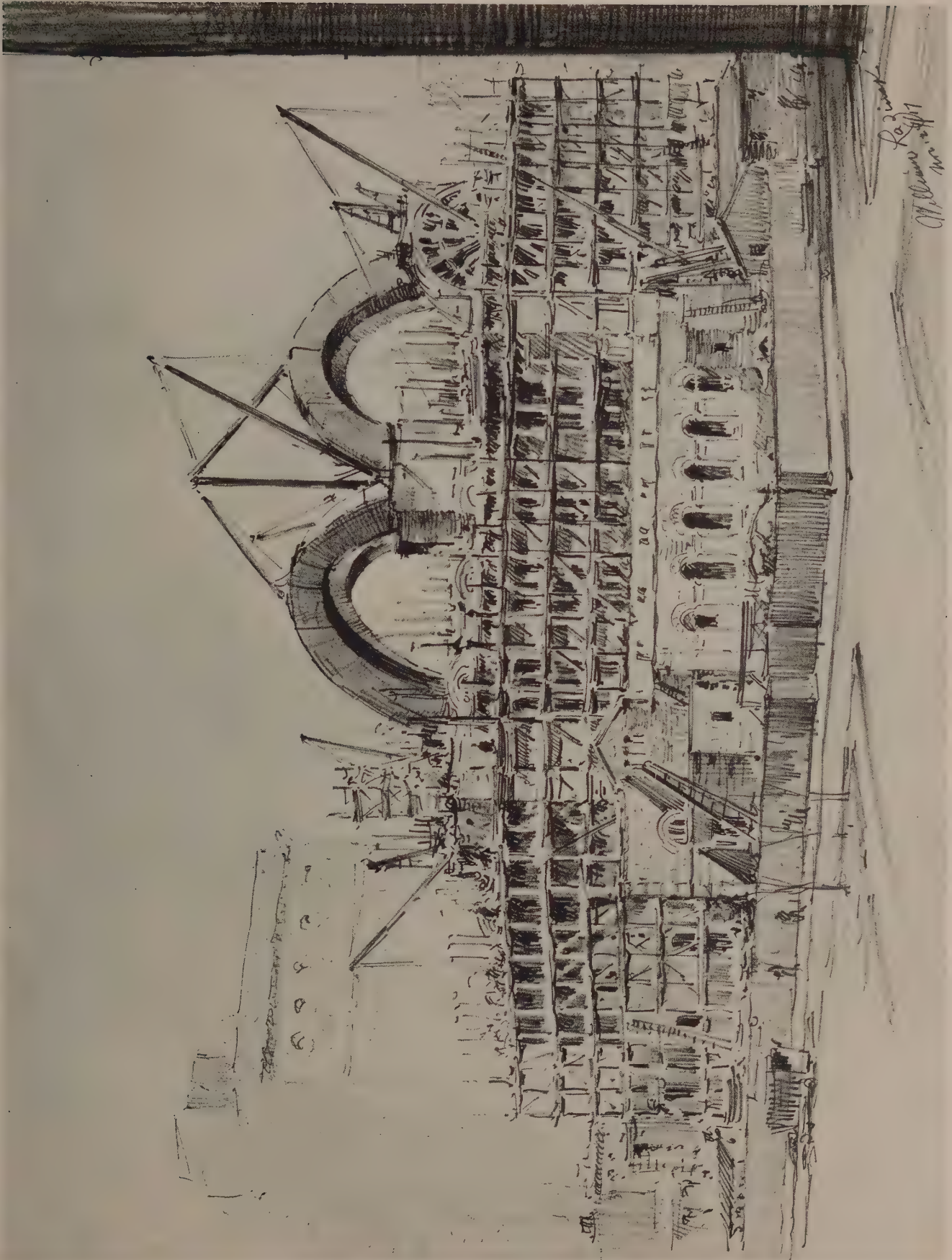
As brick and wood were the materials of buildings in those days the exigencies of war were not expected to affect their production. Yet the calls for brick and timber for use by the army and other branches of the national government were so great that there was little left for private operations, and manufacturers and traders had no time to attend to the requirement of the home-builders of the country.

The building trades adjusted their demand to the conditions of the times, which required more money to live than before the war. It was again a matter of supply and demand. Army drafts had stripped the building craft of thousands and thousands of workmen who never returned to their peaceful occupation. When building was resumed there were comparatively few mechanics to be had. Construction work increased under the urging of commercial enterprises and business expansion. The trade of the country which was held up while the national government was putting down the rebellion fairly burst all bonds. Builders were called on for larger and many more structures for commercial purposes. The return of peace, the army, and big business found the country's residential accommodations inadequate, and again builders were asked to do big things. This established a price standard which later was reduced when the ranks of the building trades were larger, but the reduction was never permitted to fall to a level anything near that which was paid to building men before the great Civil War.

The same with the new building-material prices. Folks got used to paying them. In fact, they had to get used to them, because lower quotations were out of the question, due to the general increase in the labor wage scale throughout the country. Materials used in manufacturing bricks and iron and hardware and other items of construction had increased, so that builders had to pay much larger prices for material than before the day when Fort Sumter, in Charleston harbor, was fired on by rebels under General Beauregard.

This architect, who gave up the practice of his profession many years ago, but who has kept abreast of things in the building world, says that conditions of to-day with regard to building are the same as during the Civil War. Knowing the result of this crisis on construction cost, he says that a similar result will follow the struggle in which the country is now engaged and that the result will be a new high-price level for building-material and labor.

From "The New York Sun."



ST. BARTHOLOMEW'S CHURCH, NEW YORK (IN CONSTRUCTION).

Sketch by William La Zinsk.

Bertram Grosvenor Goodhue, Architect.

Architecture and the Average Person

By Talbot Faulkner Hamlin

IT is encouraging that architects are becoming daily more cognizant of the fact that the success and progress of architecture depend not only on their own skill but also upon what might be called the communal taste of the layman. The architect designs, but his client pays the bills, and it is only as the client realizes the beauty and the advantages of the architect's design that he is willing to pay for the building that is planned. In this way the client has become the final arbiter of national taste, the architect's final critic, the final authority on what shall or shall not be built, one whose least word is law.

But however strongly the architect feels this fact—and often he is compelled to feel it in many bitter ways—the public has never been truly awakened to the part it plays in this most universal and democratic of the arts. To the "average person" the architect is too often a rather esoteric figure, dwelling in impossible lands of ranked columns and soaring domes. He is distinctly a luxury—a man to be sought gladly when one is fashionable or wealthy, but a man to be rather shunned when one is to build a mere tenement, or garage, or small dwelling, or any one of that great class of cheap structures which form so large a proportion of the buildings around us. "Why," argues the Average Person, "should I pay an architect a large sum for designing me a small building, when I can get a contractor or a real-estate company to furnish me plans for nothing and save me trouble to boot? After all, though they aren't very beautiful, the house is mine, and I am building it to live in and not to look at, and it is as good as Jones's house next door." In other words, art in building has little deep appeal to the majority of us; and beauty as a conscious end—even one of many ends—is considered a luxury, often more or less to be condemned.

Yet this is not the attitude of the same man toward music or literature. He may not read Shelley, but the *Saturday Evening Post* is his weekly companion; and, although Strauss may fall on deaf ears as far as he is concerned, nevertheless he whistles Irving Berlin for hours on end; and there is no block in any city but has its score of loud-voiced phonographs. The Average Person has come to have a vital personal interest in these things. He has made them his own. A popular short-story writer or a song-composer is a national asset to be proud of—almost a hero.

The position of the art of architecture, however, too much resembles the state of learning during the earlier Middle Ages. It is the care of an elect few; learned, apart from the world. Whistler claimed that art could never be popularized—to make it popular would be to destroy its virtue. It would appear that large numbers of architects agree with Whistler, as far as their own profession is concerned. They look with such reverence upon their art that they cannot endure the idea of its being contaminated by vulgar ideals, vulgar commercialism—an attitude which but reinforces the popular suspicion of the architect, and only postpones the day when all people shall enter the heritage of the beauty architecture may bring to them.

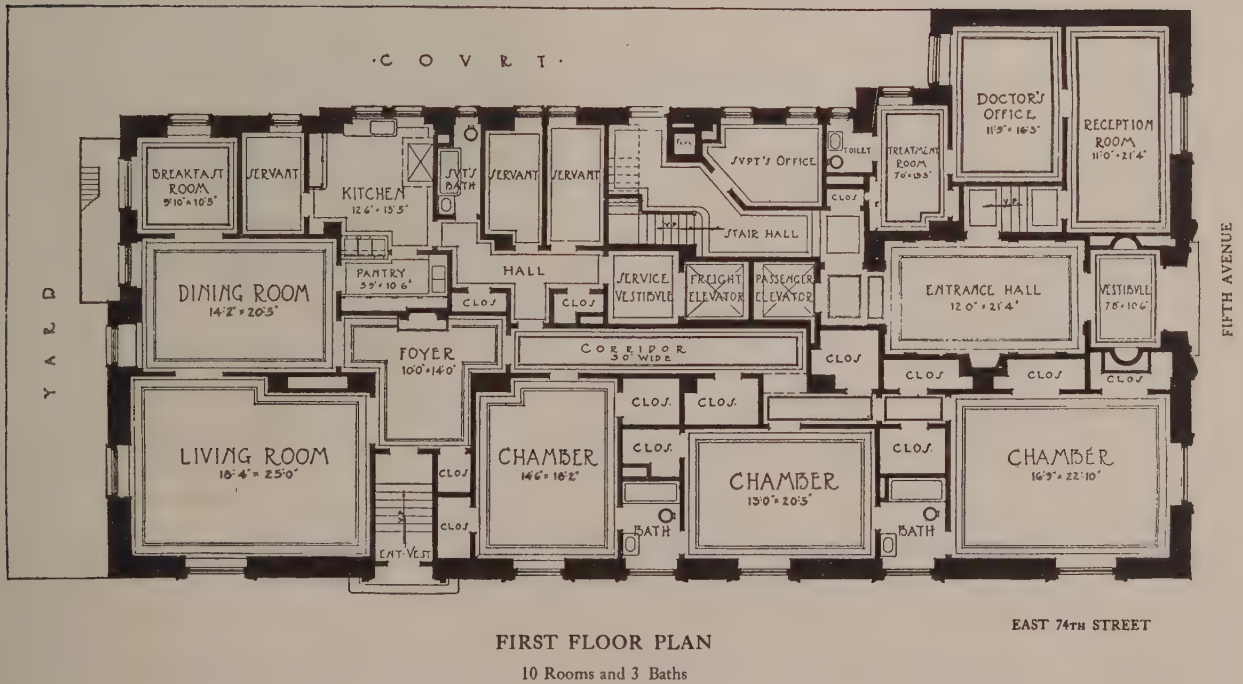
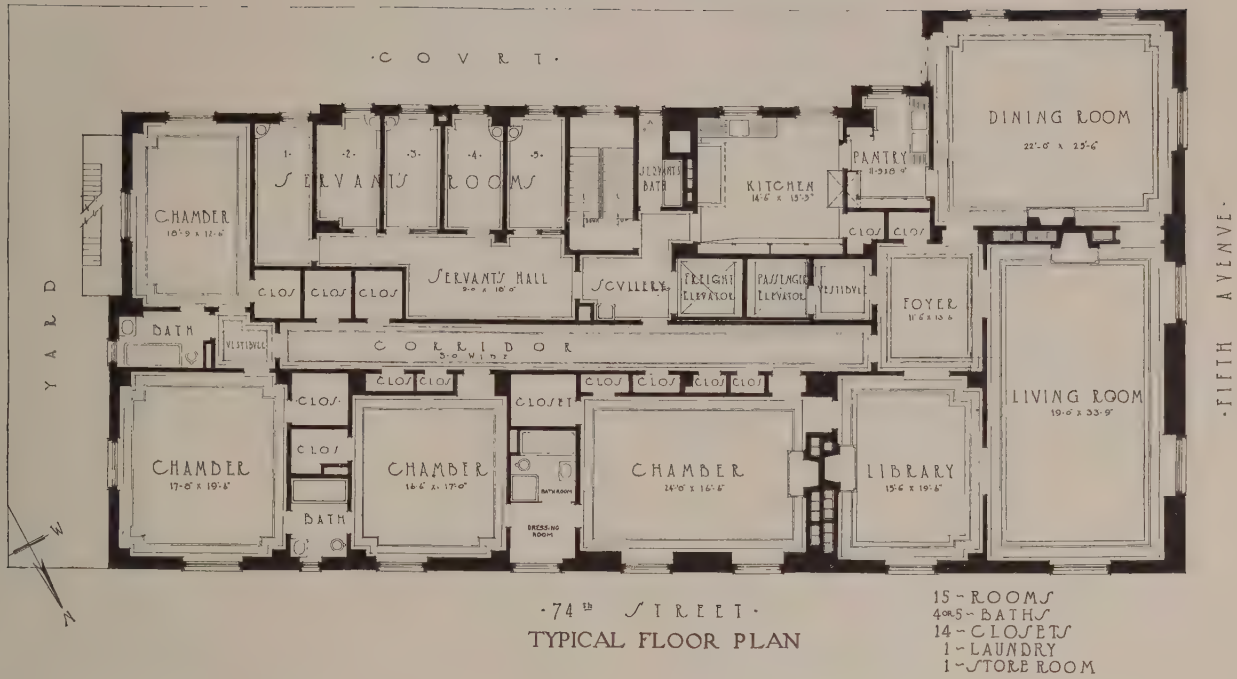
It is certainly true that architects can never succeed in making architecture popular by patronizing the public. There is nothing that antagonizes the Average Person more effectively than the assumption that he is a know-nothing and that in one's self lies all knowledge, to be meted out

as one sees fit. Neither will architecture ever be really popularized, or rather "commercialized," by any conscious lowering of artistic standards to satisfy what is miscalled "popular taste." You cannot popularize music by making Beethoven into ragtime, nor architecture by the use of tin cornices and imitation marbles. The salvation of modern American architecture from the danger of stagnation and crystallization which threatens it lies in quite other directions.

In fact the most cogent reason why architecture must be made a really popular and community art is intimately connected with the only wise and true method of bringing about this result. Architecture must be made a vital interest of the public because upon the taste and the desires of the community, reacting upon both client and architect, rests the final responsibility for the buildings we build; and the most direct way of bringing about the desired consummation is the awakening of the consciousness of the Average Person to this great fact. For, once the Average Person realizes that in his own apathy toward architecture lies the principal reason why so few buildings around him are such as to cause him true and active pleasure, then he will at once begin to lose his apathy. Once he comes to realize deeply that it is really his thoughts, his ideals, his wants, which in large part mould the forms of all the buildings he sees, then he will appreciate that there is a very real reason for cultivating his thoughts and ideals of architecture. Once he comes to understand that architecture is in this way the most democratic of the arts, the most ready to react to his will, the most constantly before him, then he will begin to make it his own.

Nothing produces such an eager sense of responsibility and interest as the feeling of part ownership. It should therefore be the duty of every one who is interested in the future of American architecture to help produce in the Average Person this proprietary consciousness.

There are numberless methods by which this feeling can be aroused. Public lectures help it. They are not enough, however; they reach too few people. Architectural magazines can help. They must try to avoid, on the one hand, an unfortunate inbreeding of purely professional opinion and taste, and, on the other, an effusive and undignified sentimentalism of vacuous appreciation. Non-professional magazines can and must help; and so must newspapers, clubs of all sorts, and, in fact, all the varied forces making for culture. They must all attempt, little by little, to introduce architectural subjects into their pages or discussions; to treat them with as much seriousness, as much eagerness, as to-day they treat literary and musical matters; and so create an ever-widening sphere of intelligent appreciation and lay criticism. Lastly, and perhaps most important of all, the architects must help; they must get out of old ruts; they must be increasingly students of the social trends of the times; increasingly sympathetic with them, increasingly alive to the wide social implications of their art. They must understand its bearing on the national life, through city planning, housing, and the like, and even more through the tonic effect of beauty per se. For not until the people realize what they owe to architecture, and how they, by their thoughts and their desires mould and form it, can architecture ever receive the keen popular criticism it so needs, or ever take the broad position in the life of the world it so deserves.



The Splendid Executive Ability in the Profession Should Be More Widely Grouped in Government Work

EDITOR ARCHITECTURE,

Fifth Avenue at 48th Street, New York, N. Y.

Dear Sir: Many reasons may be suggested as to why the genius for organization that every successful architect naturally must have is not utilized in the handling of the larger problems of our government. I will briefly refer to one that appears so obvious as to defy question.

Architects have not acted on the scriptural injunction, "Ask and ye shall receive." In a political form of government favors are granted for favors given or expected. Architects as a class are not politicians, and but few ever take part in any political movement. As a class, not being known to the politicians as being able to deliver votes, or as otherwise being useful, they are ignored.

Our representatives at Washington are truly representative of the American people, and it must be remembered that the American people have not yet reached that period in national education when they as a whole truly appreciate art, and they therefore seem to have but little regard for those whose livelihood is dependent upon any branch of art. "Architects as votaries of the greatest of all arts are still in most cases thought of not as artists and the exponents of the beautiful and enduring, but as sublimated building mechanics."

The average government official knows but little of the mental endowment, the educational requirements, the years of training, the development of those faculties of mind and character necessary for successful leadership that every competent architect possesses. They do not know nor appreciate the fact that the successful architect is first of all a trained business man and an efficient executive. They do not appreciate the fact that the successful architect each year has the direct control of the expenditure of millions of capital, sums larger in many cases than the total biennial appropriations made to maintain many of our State governments, and that these vast sums, expended under the direct control of the architect, are expended in such a manner as to conserve in the highest degree the interests of all directly or indirectly interested in these large transactions. They do not know that the successful architect must be a skilled executive, in addition to being a trained business man. Yet it is he who directs and co-ordinates the work of all of the many interests employed from the start to the final completion of any work. The successful architect is also by his very training and experience a most competent engineer. He is a structural engineer, a sanitation engineer, an illuminating engineer, a heating and ventilating engineer, a fire-prevention engineer, and in addition to being all of the above and more, he must be and is a trained diplomat. His successful dealings with so many different interests, his close personal contact with all classes of society, have taught him diplomacy in its broadest sense. Therefore, why should architects always refer to themselves as artists, or as the men responsible for the decorative features of building design? Why not, for a change, call attention to their training, ability, and experience as business men and trained executives, or even as engineers?

The public can and will appreciate us more if in addition to talking and writing about ethics and art we talk and write more about that which the public believes to be more

directly related to its every-day life. Professional dignity, to the average layman, and by the same token to the average government official, is camouflage for "bunk." Professional dignity never secured for any architect a valuable commission, but a reputation for the successful handling of the many business problems of construction work has secured many.

If our profession is to obtain proper recognition at the hands of legislators and members of Congress, we must cause it to be seen and felt that we are well-rounded men of affairs, competent and willing to do our part in the world's work, and not merely dreamers functioning in an æsthetic cloudland.

Any architect who may think that if he wraps himself in a mantle of dignity and remains in seclusion the government is bound to hunt him out and plead with him to lend the weight of his mighty intellect to the solving of our many national problems had better come out of his trance.

There is work for our profession to do. Work that can be better performed by us than by any one else. It is our patriotic duty as a profession to make use of every effort to secure proper recognition since by so doing we not only aid our own profession but forcibly call the attention of public officials to the value of architectural service. At the same time we will be performing a patriotic service by making it possible for our nation to have many things done in a better as well as in a more economical way.

Architecture, because of its necessary ramifications—preparing the way for the orderly functioning of the enterprises carried on in buildings and groups of buildings, public health, good housing, city planning, cost economies and the like—architecture, because of these ramifications, unavoidably plays a commanding part in the life of the people. Why should not the profession frankly seek out ways of making this fact clear to the public? Why should not the architects see that there is always on hand at Washington some one thoroughly versed in architectural practice and architectural possibilities, whose business it is to represent the profession—its experience, its skill, and its capacity for service to the national legislature and to the several administrative departments? If this policy were to be pursued persistently and tactfully, would it not bear results of the highest value both to the public and to the architectural profession?

Having in mind all of the qualifications of any architect, who can question but that the architect can serve his government in designing and supervising the construction of work equally as well as a railroad grading contractor?

Very truly,

F. E. DAVIDSON, A. I. A.

Catalogues Wanted

WE are in receipt of a letter from Acting Commissioner Edmund Enright, office of the Commissioner of the Interior, San Juan, Porto Rico, saying that the commissioner "is interested in receiving the latest catalogues on building materials and supplies, such as plumbing, hardware, interior finish, etc."

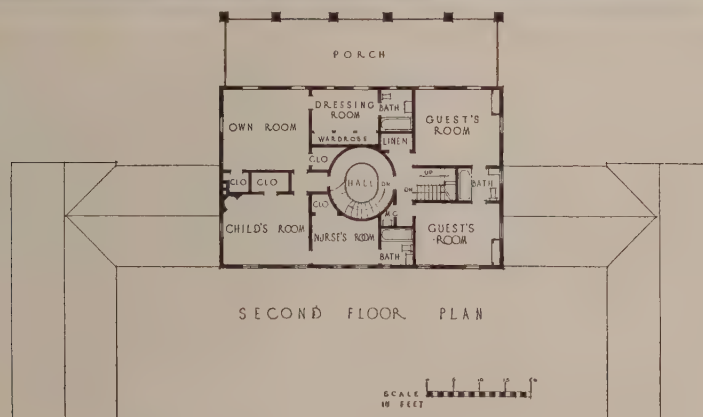


ELEVATION - FACING RIVER



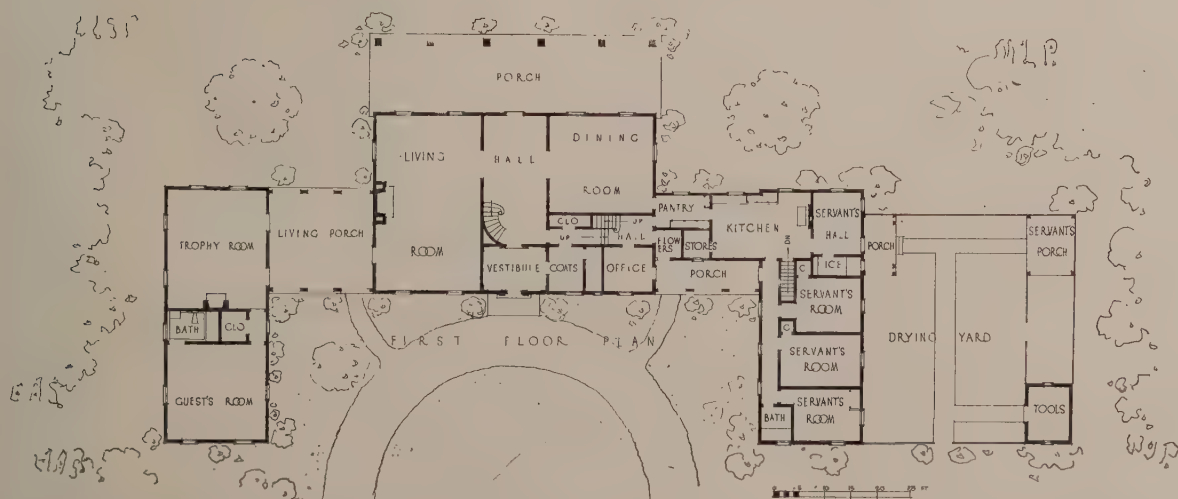
ENTRANCE FRONT

SCALE 1/8" = 1'-0"



SECOND FLOOR PLAN

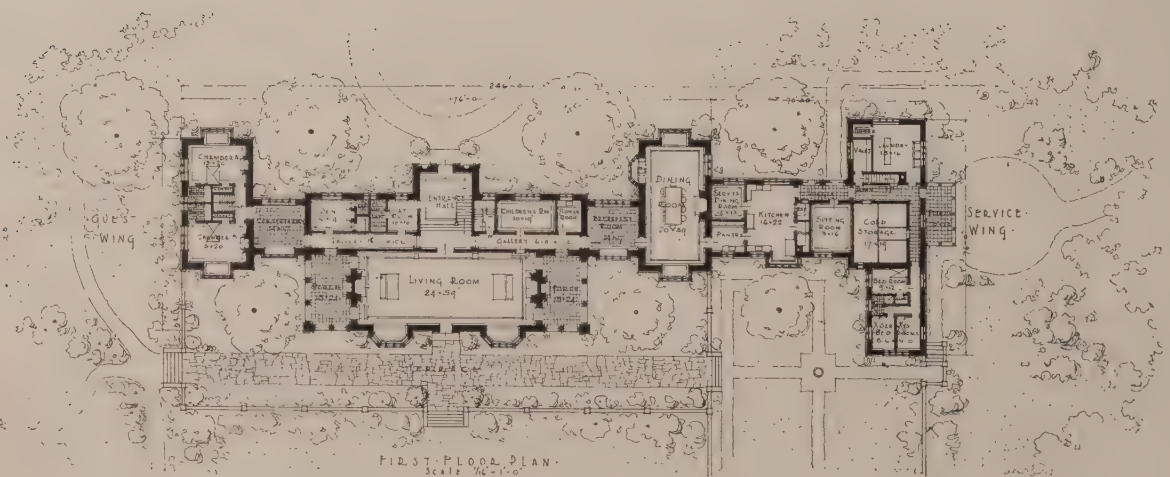
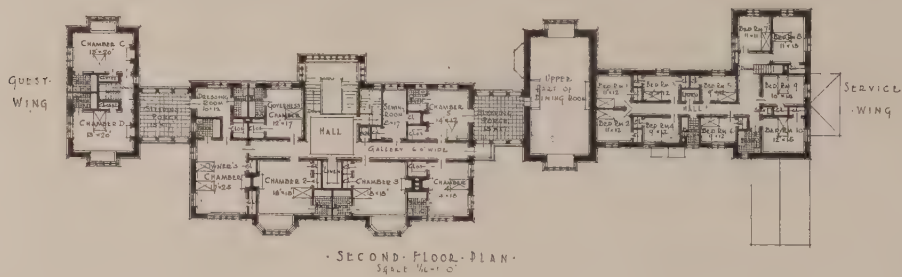
SCALE 1/8" = 1'-0"

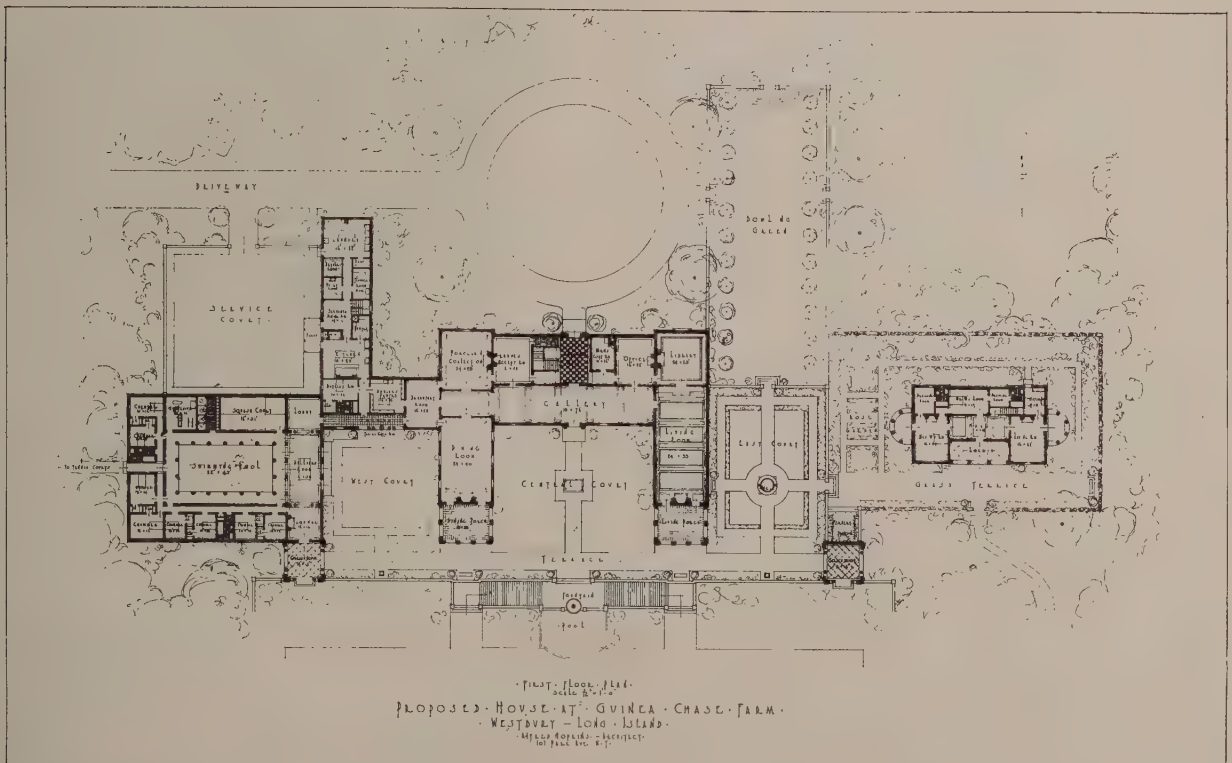


FIRST FLOOR PLAN

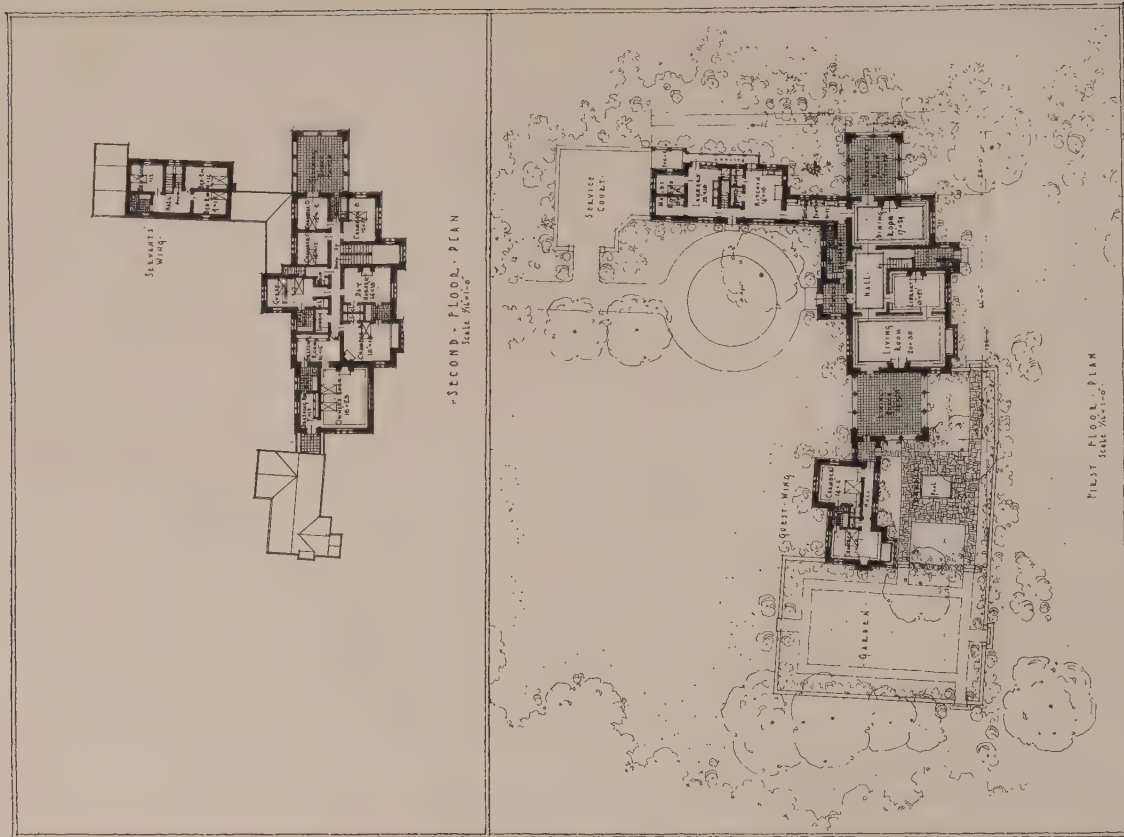
RESIDENCE FOR GEO. P. GREENHALGH, PERRYSVILLE, OHIO.

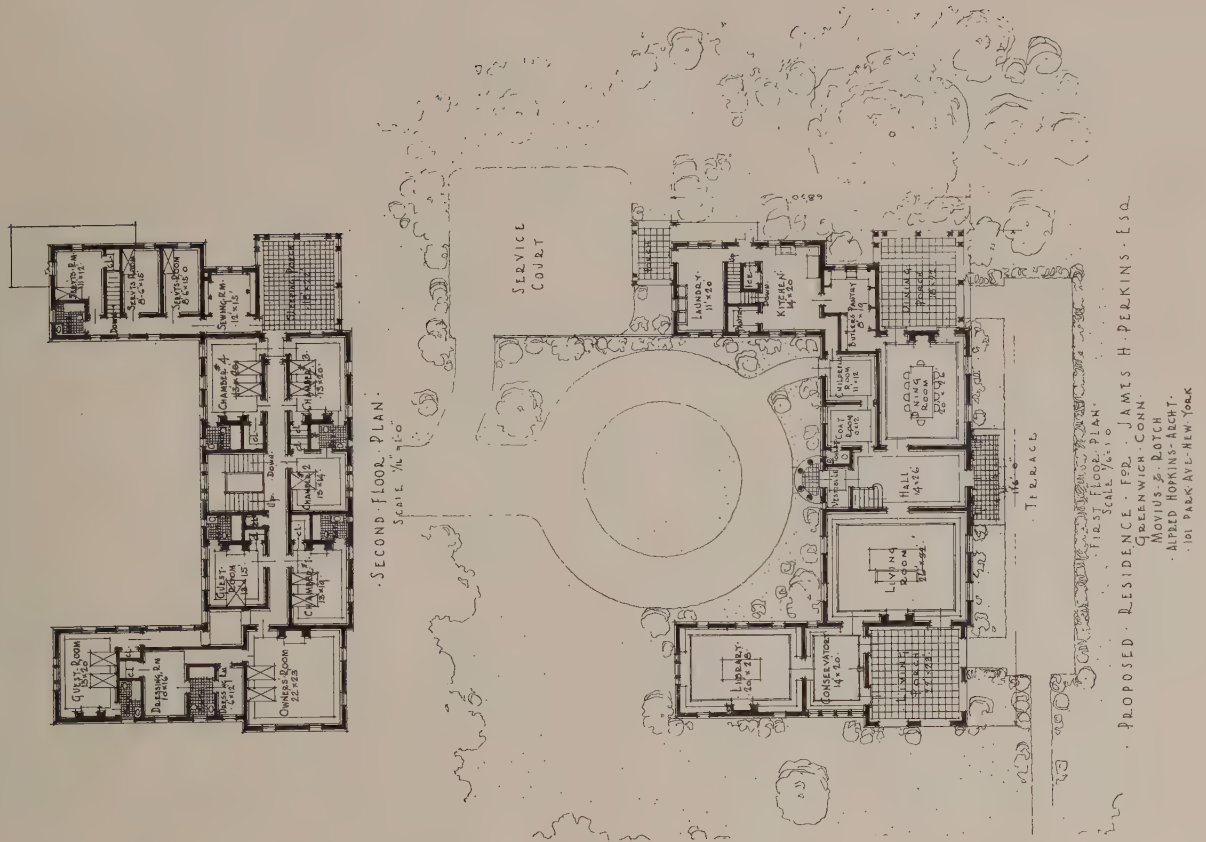
Alfred Hopkins, Architect.





ARCHITECTURE





The Samuel W. Bowne Hall

IN planning the new Samuel W. Bowne Hall at Drew Theological Seminary, Madison, N. J., the architects have not been unmindful of the beauties of Christ Church Hall, at Oxford, England, and while the new building at Drew is in no sense a copy of the building at Oxford, it carries out admirably the spirit of the English structure.

Drew Theological Seminary is a Methodist institution, and the appropriateness of selecting as a type the great hall at Oxford is apparent when we realize that here Wesley spent his undergraduate days.

The purpose of the new building is a dining-hall and dormitory, having a few rooms with baths for the entertainment of distinguished guests who may visit the seminary. The dining-hall occupies the main portion of the front of the building, in the second story, with the kitchen in an ell. The dormitory portion is located on the first floor. For the exterior of the building the architects have chosen Concord, New Hampshire, granite of a very beautiful light-gray color—in fact, the tones of the granite are in close harmony with the trunks of the large beeches among which the new building is placed. There is a small dining-room adjoining the large dining-hall for faculty use, or for class suppers, which can be served conveniently from the main kitchen.

The frontage is 136 feet and the depth of the building is 37 feet, with an ell 21 by 54 feet. The main dining-hall is 85 by 33 feet, and its side walls 30 feet high, 10 feet of which is wainscoted to the sills of the large windows, in quartered white oak. Over this panelling are the large windows indicating on the exterior the location of the dining-hall. The dining-hall is lofty, with open timbered roof, the grain of the wood preserved by the use of a golden-brown stain, harmonizing with the color of the oak wainscot. The hall has accommodations for about 225 diners. The principal approach to the dining-hall is by a monumental stone stairway with stone balustrade. The surrounding walls are of brick in several shades and the ceiling is heavily beamed and stained, similar to the timbered roof of the dining-hall into which it opens.

Organized Labor and the War

SIX months of the war have passed and industry in many regards is crippled. Strikes are called almost daily and there is not sufficient production, nor sufficient efficiency, nor any desire to speed up the work to meet the requirements of a great war. In the meantime the manufacturers have been blamed either for seeking heavy profits or for delaying the work, or for anything tangible or intangible upon which the tongue of the critic could lay hold. The statement presented to the Secretary of War clears up this situation in diplomatic language and shows what are the facts. It calls attention to the fact that only 10 per cent. of the establishments capable of munitions work are union shops. Apparently, however, it is the purpose of the labor unions to compel the unionization of the other 90 per cent. and the labor unions expect Government aid in accomplishing this purpose.

It will be unfortunate if the manufacturers of the country who appeared before the Secretary of War should consider that their work has been finished upon the presentation of this petition. It has not. The time has arrived for constant, persistent, and definite agitation for the education of both the Government and the people as to the methods and purposes and aims of organized labor in this war. There is no use mincing words about it. All the fulsome statements which are uttered by labor leaders are pure bunco

designed to throw dust in the eyes of the public. The real situation is a serious one, but it is apparently not understood by the people. An excellent purpose can be served by calling attention to the conclusions and recommendations of the committee of manufacturers which were submitted to the Council of National Defense. The committee asked for mutual understanding between employer and employee and for continuous and efficient production to equip and sustain our military forces. It points out that every dispute, whatever its motive, which interrupts production helps the common enemy. The committee also shows that the non-union man is as essential to the army as the union man and also just as essential to the factory. The Government cannot permit the exclusion of any laborer from productive employment and the Council of National Defense is asked to state that no person shall be refused employment on account of membership or non-membership in any labor organization.

From "The Industrial Economist."

Industrial Village for Soldiers and Sailors

LANCASTER, England, is to have the first industrial village for disabled soldiers and sailors, constructed on the lines set out by Mr. T. H. Mawson. Plans have been prepared, showing an estate laid out with workshops, houses for married men, and hostels or fraternal homes for unmarried men, with a new church, recreation ground, garden, bandstand, a public park, etc. Accommodation will be provided for about three hundred disabled heroes, of whom half will be married men, so that it is expected some seven hundred people will comprise the community, and that as the disabled men pass away these places will be taken in the industry and houses by their children and relatives, thus giving permanence to the scheme. The detail plans are to be proceeded with by members of Mr. Mawson's staff, and it is expected that the scheme will be launched early in the new year, on Mr. Mawson's return from Salonika.

From "Building News," London.

Book Reviews

AN INTRODUCTION TO THE STUDY OF LANDSCAPE DESIGN. By Henry Vincent Hubbard, Assistant Professor of Architecture, Harvard University, and Theodora Kimball, Librarian, School of Landscape Architecture, Harvard University. Large 4to. \$6.00. The Macmillan Company, 66 Fifth Avenue, New York City.

Landscape architecture has increasingly assumed the importance and dignity of a fine art in recent years, and its practitioners are increasingly in demand and more and more being recognized for the very important work they are doing both for the country estate and in the direction of city planning. The subject is one that has been dealt with in a more or less rather casual way, but here is a book that takes it seriously and with a delightful and inspiring conception of the theories of landscape design combined with the practical application. It is a valuable and helpful treatment of a subject of great interest.

The chapters deal with "Theory of Landscape Design," "Taste, Ideals, Style, and Character of Landscape Design," "Style of Landscape Design," "Landscape Characters," "Landscape Effects," "Landscape Composition," "Natural Forms of Ground, Rock, and Water as Elements in Design," "Planting Design," "Design of Structure in Relation to Landscape," and "Types of Landscape Design."

The Appendix has notes on "The Professional Practice in Landscape Architecture in America," notes on "Procedure in Design," and includes a helpful list of "Reference on Landscape Architecture." As the authors say the book is intended to be used as a useful text-book, they have made the subject index unusually full. It will be, indeed, a helpful text-book for the profession and a source of information and profitable reading for the layman. The volume is admirably illustrated with many line-drawings by Mr. Hubbard and others and with a series of plates from photographs.

FURNITURE OF THE OLDEN TIMES. By Frances Clary Morse. The Macmillan Company. 12mo. \$6.00.

A new edition of this useful reference book, with many new illustrations and a new chapter on "Doorways, Mantels, and Stairs," fully illustrated, that will appeal especially to the architect.



HOUSE AND PLANS, CHAS. G. LATHROP, DETROIT, MICH.

Smith, Hinchman & Grylls, Architects.

Legal Decisions of Interest to the Architect

These decisions appear monthly and are edited by Mr. John Simpson, the well-known lawyer

OWNER'S RIGHT TO MATERIALS ON CONTRACTOR'S BANKRUPTCY

A building contract provided that, if the contractor refused or neglected to supply a sufficiency of materials or workmen, the owner might provide them and deduct the expense from the amount of the contract, and that all work and materials delivered on the premises to form part of the works would be considered the property of the owner and not be moved without his consent, but that the contractor should have the right to remove all surplus materials after the completion of the work. When a petition in bankruptcy was filed against the contractor, materials not yet incorporated in the building were on the ground. The Circuit Court of Appeals, Third Circuit, holds that the owner's right thereto under the contract was superior to the right of the trustee under the amendment of 1910 giving the trustee the status of a lien creditor as of the time the petition is filed, as the lien of a creditor would have been subordinate to the owner's rights. In *re Shelly*, 242 Fed. 251.

ACTION FOR SERVICES AS ARCHITECTS

Architects entered into a contract whereby they agreed to furnish plans, specifications, and architectural services to remodel a bank building and do the work for \$30,000. By a later writing they agreed "to execute the additional items in connection with the alterations and additions to your bank building in Pittston for the sum of \$33,000 in addition to our previously accepted estimate, No. 9821, all conditions of which are to apply." The contract further provided: "We agree to allow you the privilege of cancelling the order at any time before the work is begun, and, in the event of our not going on with the work, to accept as our remuneration a sum based on the schedule of charges endorsed by the American Institute of Architects." In pursuance of such power the owner cancelled the order and erected a new building on another site. The architects were unsuccessful bidders for this work, and thereafter sued for their fees as architects, claiming \$3,900. The defendant conceded it owed some \$600 for such fees, and alleged that this sum had been agreed upon between the parties when the order for the building was cancelled. The jury found for the architects for the \$3,900 claimed. On appeal the Circuit Court of Appeals, Third Circuit, held that it was within the trial court's discretion, and not an abuse of its discretion, to admit a printed circular over the name of the secretary of the American Institute of Architects, identified as its schedule of charges, as against the objection that the schedule should be proved by the minutes of the society, as this objection went simply to its authentication and the question was one of incidental procedure and sufficiency of proof. Evidence that a person in the architects' employ, but not shown to have had anything to do with the settlement of the old contract, said the architects' charge would be only \$600 was properly excluded. Judgment for the architects was affirmed.—*First Nat. Bank vs. Hoggson Bros.*, 242 Fed. 261.

CONSTRUCTION OF SPECIFICATIONS

Under one provision of specifications for concrete work no bars were to be used in the slab reinforcement of the floors and roof, while under another provision it was optional with the contractor as to whether or not in the slab reinforcement

of the floors and roof bars or fabric should be used. There was thus a conflict; but the provision stating that no bars should be used in the floors and roof reinforcement was general in its character, while the other provision referred specially to floors and roof, and it was held in an action to foreclose a mechanic's lien that that provision should control as to the nature of the work to be done on that part of the building. It was, however, held that under these two provisions the original contractor was required to furnish and set in place either bars or fabric for the floor and roof reinforcement; and that, of course, unless, as asserted by him, the expression "etc." found in his contract was without force and meant nothing.

He took over the contract for the general installation of the reinforcing steel for the building, and when he did so it was doubtless expected that all work of that character would be done by him; and the court thought his contract when fairly construed so provided. The contract required him to furnish and set in place all the reinforcing bars, tying wire, "etc.," according to the plans and specifications for the building. It was held that the expression "etc." as so used, must have been used for some purpose; and the court held it meant "other reinforcing material," which, of course, would include fabric. Its effect, taken in connection with the above-mentioned provision of the specification was to require the contractor to furnish and install bars or fabric in the slab reinforcement of the floor and roof.—*Soule vs. Northern Const. Co. (Cal.)*, 165 Pac. 21.

OWNER'S RIGHT TO COMPLETE WORK ON CONTRACTOR'S FAILURE

Where a building contract contained no provision for the completion of the building on the contractor's failure to complete it, the owner had the right, on the contractor's abandonment of the work, to complete it and charge the reasonable cost to the contractor. The owner was not required to submit the cost of completion to competitive bidders, nor to complete it at the lowest possible cost, but had the right to expend such sum for labor and material as was fairly and reasonably necessary to complete the building according to the contract and the architect's plans and specifications.—*Schmidt Bros. Const. Co. vs. Kaymond Y. M. C. A.*, Iowa Supreme Court, 163 N. W. 458.

CONTRACT FOR ALL MATERIALS REQUIRED

A contract between an owner and a material man provided that the material man was to furnish the owner all the materials he required for the improvement of his property. The Kansas City Court of Appeals holds that the material man under such a contract is bound to deliver all the owner orders.—*Tull vs. Fletcher (Mo.)*, 196 S. W. 436.

PRIORITY OF LIENS

A mortgagee may safely witness the construction of a building upon the property mortgaged, and the use of material therefor furnished subsequent to the date of his mortgage, but if instead of merely resting on the priority of his security he agree with the contractor that his mortgage is to be a second lien, and knowingly permit the material man to act on the strength of his agreement that the contractor is to

Continued on page 26

TARGET-AND-ARROW ROOFING TIN



Stable and Garage of a large country estate near Baltimore, Md.

Roofed with 20,000 sq. ft. of TARGET-AND-ARROW tin, by Jno. G. Hetzell & Son, roofers, Baltimore.

The roofing is applied with standing seams, giving a ribbed effect, and is painted a light gray color.

Do not overlook the possibilities of attractive color effects in using tin roofing. In the past tin roofing was seldom thought of as having any artistic merit. Nowadays standing seam or heavy ribbed types of tin roofing—either with large or small ribs, rounded or square—colored to harmonize with the general color scheme of the building, give a roof of character and distinction for any class of building.

The first coat of paint for a tin roof should be one of the kinds approved by the National Association of Sheet Metal Contractors, i. e., metallic brown, Venetian red, red oxide or red lead, with pure linseed oil and very little if any dryer. Over this first coat any color can be applied, for instance—a gray lead color, to

simulate the weather-beaten appearance of the lead roofs of old English cathedrals; a light green to give the appearance of old copper; or a nut brown color for a remarkably rich effect. For a red brick building, try dull green or soft gray. Even if the entire roof of the building is of some other material, such as slate, tile, etc., the tin flashings, open valleys, etc., should be painted to harmonize in color with the rest of the roof.

A good tin roof deserves a coat of paint every four or five years to repair the ordinary wear and tear of the weather, and to keep it in perfect condition. This repainting also affords an opportunity to freshen up the color.

A list of color suggestions is given on "Service Sheet" No. 4, Index No. 18, issued by the Architectural Service Corporation of Philadelphia.

Description of this product will be found in Sweet's Architectural Catalog—all editions.

N. & G. TAYLOR CO., PHILADELPHIA
Headquarters for Good Roofing Tin since 1810

have the first lien, it does not lie in the mouth of the mortgagee thereafter to claim a lien superior to that of the material man.—*Elder Mercantile Co. vs. Ottawa Inv. Co.*, Kansas Supreme Court, 165 Pac. 279.

BUILDING SUPERINTENDENT'S CONTRACT CONSTRUED

A building superintendent's contract provided that he should be paid 10 per cent. upon the cost in the event the buildings were completed for an amount not exceeding a certain sum, and that "should he fail to keep within the above-mentioned maximum cost then no charge should be made for such superintendence for such excess." The California Supreme Court holds that the owner was not, in case the cost exceeded the maximum sum, released from obligation to pay the percentage charged on such maximum sum, but was relieved from paying the percentage only as to the excess above such sum.—*Payne vs. Cunningham* (Cal.), 165 Pac. 531.

MECHANICS' LIENS—CERTAINTY OF CLAIM

A suit for a mechanics' lien cannot be maintained where the lien claim does not disclose how much material had been furnished for the building against which the lien was claimed; another building having been erected at the same time on an adjacent lot by the same contractor, and the claimant having furnished material for both.—*De Wolf vs. Bonee* (Conn.), 101 Atl. 233.

ACCEPTANCE OF BUILDING—TAKING POSSESSION

The mere fact that the owner took possession of a house built for him and made a payment for extras did not necessarily amount to a waive of the stipulations of his contract, as a payment made on a contract may or may not affect the contractual relations of the parties according to the circumstances of the case. A contract for the construction of a house provided that final payment was to be made when the work was completed to the owner's satisfaction. The owner did not discover that the canvas roofing leaked until he had made the final payment. It was held that his act in taking possession of the house and making a payment of \$150 for extras was not such an acceptance as to relieve the builder from the performance of his work in a proper manner before he was entitled to payment of the balance due him for his extra work.—*Burr vs. Ellis* (Conn.), 101 Atl. 17.

WHERE ARCHITECTS' CERTIFICATE NECESSARY BEFORE SUIT

The Minnesota Supreme Court holds that where a building contract provides that all payments shall be made upon written certificates of the architect that they have become due, that only the certificate for the final payment

shall be evidence of the completion of the contract, and that a written guaranty must be furnished guaranteeing the roof for a period of ten years before payment will be made for the roof, the issuance of such final certificate and the furnishing of such guaranty are conditions precedent to the right to collect the final payment. A pleading which sets forth the contract, but does not allege the issuance of the certificate or the furnishing of the guaranty, nor any excuse for failing to procure them, does not state sufficient facts to entitle the contractors to recover the final payment.—*St. Paul Sash, etc., Co. vs. Berkner* (Minn.), 163 N. W. 668.

SUFFICIENCY OF PERFORMANCE BY CONTRACTOR

A building contract specifying material and method of work for constructing cement floors to be approved by the owner's architect is complied with and the contractor is entitled to compensation, where the specifications are followed and a monthly certificate of the architect approving the work is obtained, although the flooring subsequently proved unsatisfactory and the architect refused a final certificate on account of such defects.—*Roebling Const. Co. vs. Doe Estate Co.* (Cal.), 165 Pac. 547.

RELEASE OF CONTRACTOR'S SURETY

A building contractor in his contract agreed to pay off and discharge claims for labor and material used in the building, and if he failed to do so that the owner at his option might pay off all such claims as should be liens on the property, and that the contractor should be liable only to refund to the owner money so paid, and that the contractor and the surety on his bond should be liable to the owner for the amount so expended. The condition of the surety's bond was that the contractor should perform all obligations imposed on him by the contract. The owner purchased bricks which he was authorized only to select under the contract, and made himself liable therefor. In an action on the bond the Texas Court of Civil Appeals holds that the owner violated the contract, and, as the bonding company became liable only for such claims as became liens on the property, and no lien having been established, the surety was released.—*General Bonding & Casualty Ins. Co. vs. Harlan* (Tex.), 196 S. W. 906.

PRIORITY OF MECHANICS' LIENS

The Rhode Island Supreme Court holds that mechanics' liens for material are superior to a mortgage on a building executed after the excavation of the cellar had been started, where the building was constructed according to the original plans, although the property changed ownership between the cellar excavation and construction of the building proper.—*Lansing vs. Campbell* (R. I.), 101 Atl. 1.

The New Commercial Manager of the Sprague Electric Works

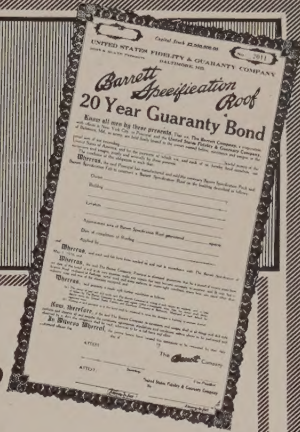
MR. FRANK W. HALL has been appointed Commercial Manager of the Sprague Electric Works of General Electric Company. With the exception of a short period Mr. Hall has been connected with the Sprague Works continuously for twenty-two years in various engineering and sales capacities, and for the three years prior to his present appointment occupied the position of sales manager. Mr.

D. C. Durland, former executive head of the Sprague Electric Works, has resigned to accept the presidency of the Mitchell Motors Company, Inc.

Mr. McQuade's Drawings

WE regret the absence of Mr. McQuade's usual drawing from this number. Like so many others of our readers he has been called to the service of the colors. We hope later that he will be able to find the time to resume his highly valued work for ARCHITECTURE.

Barrett Specification Roofs



In San Antonio, for instance—

IN EVERY American city the principal new buildings are covered with Barrett Specification Roofs. On the large flat areas of such edifices this type of roofing wins on the figures, being low in its first cost, permanent, reliable, and having no maintenance costs whatever.

In San Antonio, for example, the principal new buildings of the last year are shown here — three handsome schools, a power-house, a large grocery, a warehouse, a large publishing-building — and they all have Barrett Specification Roofs.

All of these roofs carry Barrett 20-Year Guaranty Bonds. The procedure is as follows:

The owner puts into his building specifications the clause, "The roof shall be laid according to The Barrett Specification dated May 1, 1916, and the roofing contractor shall secure for me the 20-Year Guaranty Bond therein mentioned."

Only competent roofers can obtain the bond and Barrett

inspectors visit the job to see that the specification is followed.

On their certification of the contractor's due compliance with The Barrett Specification, the 20-Year Guaranty Bond is duly issued by one of the largest surety companies in America.

The bond costs the contractor and the owner nothing. It is issued in the interest of good materials and good workmanship, and we pay for it.

20-Year Guaranty Bond

The 20-Year Guaranty Bond is given on all Barrett Specification Roofs of fifty squares and over in all towns in the United States and Canada with a population of 25,000 and over, and in smaller places where our Inspection Service is available.

Our only requirements are that the roofing contractor shall be satisfactory to us and that The Barrett Specification of May 1, 1916, shall be strictly followed.

Further information and copies of The Barrett 20-Year Specification, with roofing diagrams, sent free on request.

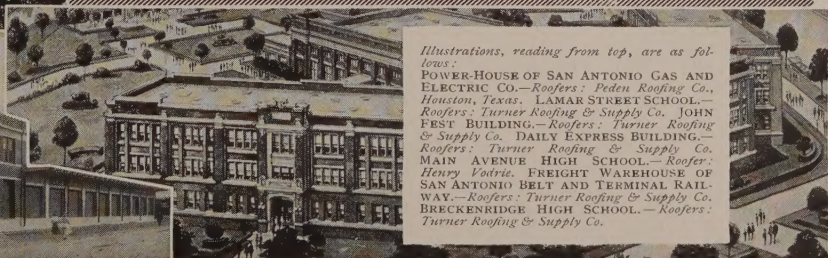
The Barrett Company

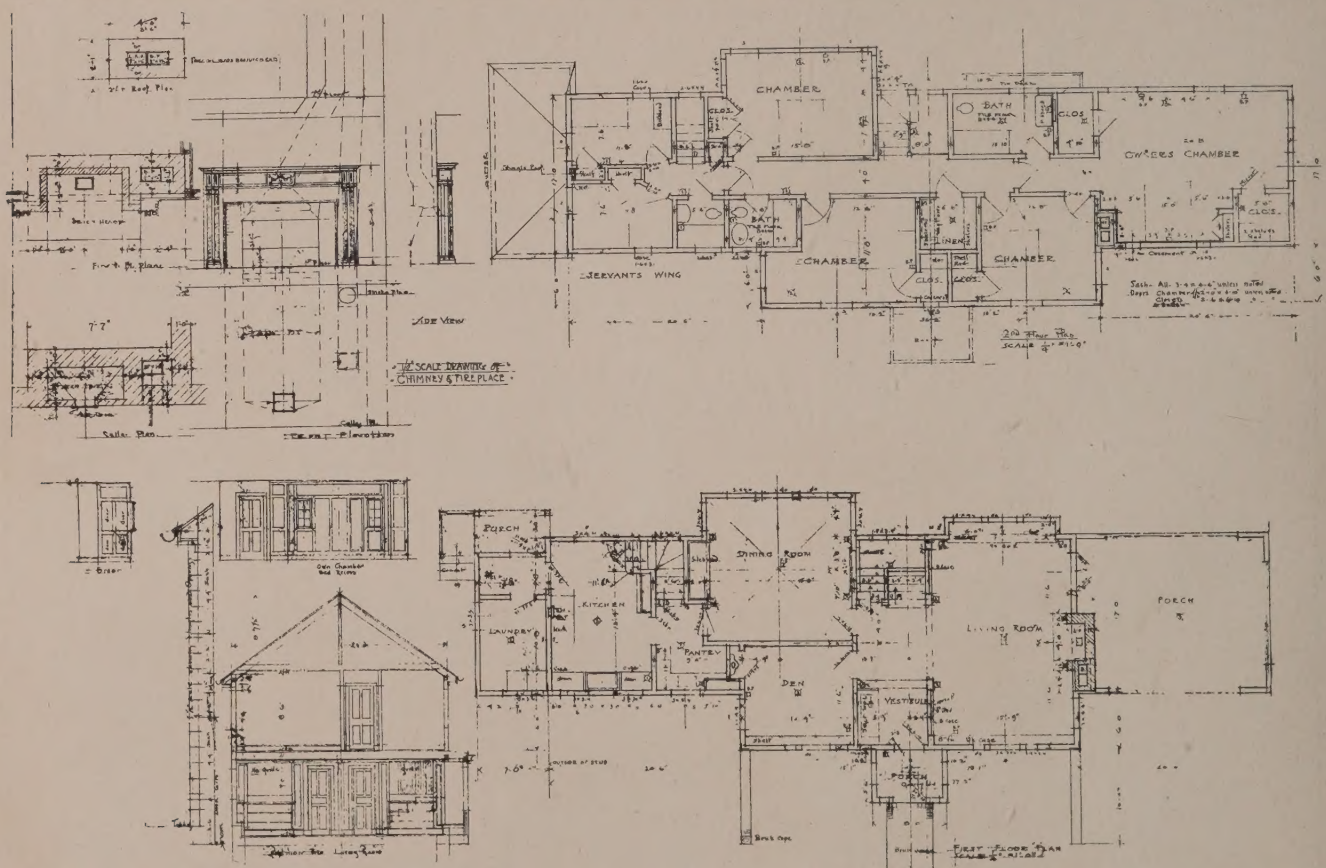
New York	Chicago	Philadelphia	Boston	St. Louis	Cleveland
Cincinnati	Pittsburgh	Detroit	Birmingham	Kansas City	Minneapolis
Nashville		Salt Lake City	Seattle	Peoria	

THE BARRETT COMPANY, Limited: Montreal Toronto Winnipeg
St. John, N. B. Halifax, N. S. Sydney, N. S. Vancouver



Illustrations, reading from top, are as follows:
POWER-HOUSE OF SAN ANTONIO GAS AND ELECTRIC CO.—Roofers: Peden Roofing Co., Houston, Texas. LAMAR STREET SCHOOL.—Roofers: Turner Roofing & Supply Co. JOHN FERT BUILDING.—Roofers: Turner Roofing & Supply Co. DAILY EXPRESS BUILDING.—Roofers: Turner Roofing & Supply Co. MAIN AVENUE HIGH SCHOOL.—Roofers: Henry Exotic. FREIGHT WAREHOUSE OF SAN ANTONIO BELT AND TERMINAL RAILWAY.—Roofers: Turner Roofing & Supply Co. BRECKENRIDGE HIGH SCHOOL.—Roofers: Turner Roofing & Supply Co.





HOUSE AND PLANS, H. R. JOHNSTON, MONTCLAIR, N. J.

Wallis & Goodwillie, Architects.